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

EXHIBIT
S4

- 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 specifically do for the program.
- 19 A. The Inspection, Compliance, and Remediation Program covers a wide range of
 20 activities including the regulation of underground and aboveground storage tanks; the
 21 regulation of industrial hemp; the regulation of pesticides, animal feed and remedy;
 22 fertilizer labeling, storage, and use; the state's Emergency Planning and Community
 23 Right to Know Act (EPCRA) program; the State's Brownfields program and the
 24 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?

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- 32 A. This testimony was prepared on behalf of the Staff of the South Dakota Public 33 Utilities 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,
 Regulated Substance Discharges, would apply. Depending on the location of the
 release, SDCL ch. 34A-2 Water Pollution Control, ARSD art. 74:51 Surface Water
 Quality, ARSD art. 74:52 Surface Water Discharge Permits, and/or ARSD art. 74:54
 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 the department's Water Quality Program.
- Q. Would DANR be involved in the event of a release from the carbon dioxide
 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.
- 51 A. DANR does not have specific thresholds for carbon dioxide. The State does have
 52 standards for other parameters in groundwater such as pH, heavy metals, total
 53 dissolved solids, dissolved oxygen, and more. These parameters are detailed in the
 54 State's groundwater quality standards. See ARSD art. 74:54, Groundwater Quality.
 55 DANR also has drinking water standards and surface water quality standards that
 56 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 carbondioxide release into soil?

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- A. The remediation activities depend on the soil type, previous conditions of the soil, and the amount of carbon dioxide released. Remediation activities could include tilling the soil to release trapped carbon dioxide or applying a lime additive or sodium bicarbonate to increase the pH in the soil. Remediation is also risk-based and dependent on the presence of nearby receptors.
- Q. What kind of remediation activities are conducted in response to a carbon
 dioxide release into groundwater?
- 67 A. The remediation activities would be risk-based and would depend on the presence of 68 nearby receptors. Contaminated groundwater can be treated to adjust the pH or may 69 be filtered to remove contaminants.
- Q. What kind of remediation activities are conducted in response to a carbondioxide release into surface water?

- 72 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 installed to increase oxygen inputs into the system.
- 75 Q. What are the leak size requirements for a reportable spill or release from a 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 carbondioxide 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).

- 94 Q. Is there the potential for carbon dioxide to enter wells? If yes, what types of 95 remediation methods would be used to remove carbon dioxide from impacted 96 wells?
 - A. Yes. The greater water quality concern following a carbon dioxide release is the possible lowering of the pH of the water and the potential for mobilization of heavy metals or other contaminants already present. Remediation activities may be based instead on treating the pH or removing other contaminants instead of removing carbon dioxide, which is highly soluble in water. Options include treating the groundwater to adjust the pH or filtering the well water to remove contaminants.
 - Q. What if you can't achieve remediation of a well?

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

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

 137 in soil, surface water, and groundwater mediums.
- 138 Q. Does this conclude your testimony?
- 139 A. Yes.

Patricia Kindt

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Pierre, SD 57501
605.773.3296

PROFILE/PROFESSIONAL SUMMARY

I have been employed with the Department of Agriculture and Natural Resources for over 33 years. I have worked in multiple program areas and as a result, have experience with a wide variety of permitting, reporting, compliance, and remediation issues.

EMPLOYMENT:

June 2018-present

Environmental Scientist Manager South Dakota Department of Agriculture and Natural Resources (previously Department of Environment and Natural Resources)

Team Leader for the Spills Team which includes the following: Brownfields, Spills, Environmental Assessments, and Superfund Amendments and Reauthorization Act (SARA) Title III.

- Manage the Regulated Substance Response Contract (prepared the Request for Proposals (RFP), coordinated evaluation of proposals, made consultant recommendations to the Department Secretary).
- Prepare contract amendments.
- Supervise five staff members.
- Train and mentor new employees.
- Oversee the Brownfields, Environmental Assessments, Superfund Amendments and Reauthorization Act (SARA) Title III, and Spills Cleanup sections/programs.
- Responsible for determining cleanup requirements for spills, oversee and direct cleanup work, sign initial spill cleanup letters, and assign staff to oversee and direct cleanup work.

- Perform employee evaluations.
- Member of team that reviews drift complaint investigation decisions prior to issuance of enforcement letters and financial penalties.
- Speak with industry groups and other organizations (invited speaker at conferences and other events).
- Conduct annual on-line reporting assistance workshops.
- South Dakota Representative (alternate), to the Regional Response Team (RRT).
- State Emergency Response Commission designee.
- Member of the South Dakota Rail Plan Advisory Committee (2021-2022).

October 2005-June 2018

Environmental Program Scientist

South Dakota Department of Environment and Natural Resources

Managed the Superfund Amendments and Reauthorization Act (SARA) Title III program in South Dakota and assist the spills team with spill cases.

- Point of contact for SARA Title III reporting questions.
- Identified, contacted, and assisted storage and manufacturing facilities, to ensure reports were filed in compliance with SARA Title III.
- Reviewed hazardous material storage, handling, release, and disposal reports.
- Collected reporting fees.
- Made reports and data summaries available to first responders and the general public via online databases developed in cooperation with the South Dakota Bureau of Information and Telecommunications BIT).
- Held annual informational/compliance assistance workshops in various cities across the state.
- Held annual on-line reporting assistance workshops.
- Spoke with industry groups and other organizations (invited speaker at conferences and other events).
- Worked with Local Emergency Planning Committees (LEPCs) to encourage local planning efforts.
- Collected LEPC membership rosters on an annual basis.
- Evaluated LEPC grant applications and make recommendations to the State Emergency Response Commission (SERC).
- Served as staff to the SERC.
- South Dakota Representative (alternate), to the Regional Response Team (RRT).
- Supervised seasonal staff and coordinated with/trained coworkers.
- Served as backup to the South Dakota spills program, taking spill calls and serving as a spill cleanup project manager.
- Served as the DENR contact for livestock emissions reporting questions.

September 2001 – October 2005

Environmental Project Scientist

South Dakota Department of Environment and Natural Resources

Responsible for organizing sampling plans/schedules, completing Use Attainability Analysis (UAA) studies, and completing the Quality Management Plan (QMP).

- Was an initial point of contact for the public and other agencies.
- Performed fish and turtle kill investigations.
- Maintained/updated the federal Storage and Retrieval (STORET) and DENR fish sampling databases.
- Communicated/spoke with school groups and other organizations about surface water quality issues.
- Organized Mercury in fish flesh sampling efforts. Chose lakes to sample, species to target, and sampling methods.
- Wrote fish flesh sample collection procedures, put together sampling kits, and coordinated with Department of Game, Fish, and Parks (GF&P) staff.
- Analyzed data to determine whether a fish consumption advisory was warranted (recommended advisories be issued for 4 lakes).
- Performed sampling and data collection work for UAA's.
- Organized data, made classification recommendations, and wrote over 40 UAA reports.
- Developed an "Access" database so samplers could track sampling frequency and analysis parameter requirements for designated WQM sites.
- Took Water Quality Monitoring (WQM) samples from designated sites.
- Was quality assurance officer for DENR sampling activities.
- Worked with the Environmental Protection Agency (EPA), and wrote the departments first signed/approved QMP.
- Maintained the Surface Water Program webpage.

March 1998 - September 2001

Environmental Project Scientist

South Dakota Department of Environment and Natural Resources

Responsible for performing hazardous waste inspections and managing Biennial Report submittals.

- Provided technical assistance to regulated hazardous waste facilities.
- Managed, collected, and solicited Biennial Hazardous Waste Report submittals.
- Performed hazardous waste inspections and wrote approximately 140 inspection reports.
- Wrote enforcement/settlement agreement documents.

- Assigned identification numbers.
- Maintained federal and state databases.
- Maintained the Waste Management Program webpage.

June 1997 - March 1998

Environmental Project Scientist

South Dakota Department of Environment and Natural Resources

Responsible for performing solid waste inspections, writing general permits, and issuing authorization to operate.

- Initial point of contact for the public, regulated community, and other agencies for general permit questions.
- Primary contact for solid waste complaints.
- Wrote general and individual solid waste permits.
- Reviewed applications and issued authorization for facilities to operate under general permits.
- Performed solid waste inspections and wrote inspection reports.
- Reminded permitted/authorized sites of permit renewal deadlines and compliance dates.
- Received Solid Waste Association of North America (SWANA) certification for a Manager of Landfill Operations (MOLO).
- Maintained the Waste Management Program webpage.

February 1995 - June 1997

Natural Resources Project Scientist

Department of Environment and Natural Resources

Accepted spill reports and provided oversight/directed spill remediation activities.

- Initial point of contact for regulated substance spill/release events.
- Provided recommendations and directed cleanup/provided oversight for remedial work on an estimated 600 spill cases.
- Investigated citizen complaints.
- Spoke at conferences and other events.
- Prepared Preliminary Assessment (PA) documents for CERCLIS sites (pre-Superfund sites)

January 1990 – February 1995

Natural Resources Analyst

Department of Environment and Natural Resources

Accepted spill reports and provided oversight/directed spill remediation activities.

• Initial point of contact for regulated substance spill/release events.

- Provided recommendations and directed cleanup/provided oversight for remedial work on an estimated 600 spill cases.
- Investigated citizen complaints.

Summers of 1988 and 1989

Park Ranger (seasonal)

United States Army Corps of Engineers - Fort Randall Project

Supported Corps of Engineers staff in efforts to accommodate campground visitors.

- Assisted with guest education/entertainment services in the Corps operated camparounds.
- Assisted in preparation of the old Fort Randall site for an archaeological project.
- Patrol of campgrounds and other public access areas.
- Repair of signage and split rail.

Summers of 1986 and 1987

Tour Guide (seasonal)

United States Army Corps of Engineers - Fort Randall Project

Provided tours of the powerhouse.

• Directed just under 1000 powerhouse tours.

EDUCATION

Bachelor of Science in Biology, Minors in English and Chemistry University of South Dakota, Vermillion, 1989

TRAINING

8-Hour OSHA HAZWOPER Annual Refresher March 20, 2023
(Previous annual refresher course dates: - March 1, 2022,; April 13, 2021; April 14, 2020;
March 11, 2019; March 27, 2018; March 17, 2017; March 22, 2016;
March 10, 2015; March 18, 2014; March 13, 2013; March 20, 2012;
March 22, 2011; March 23, 2010; March 17, 2009; March 25, 2008;
March 13, 2007; March 14, 2006; March 15, 2005; March 16, 2004;
March 26, 2002; April 9, 2001; March 3, 2000; April 1, 1999;
March 31, 1998; April 2, 1997; April 26, 1996; April 4, 1995;

	April 12, 1994; April 1, 1993; and May 29, 1991)
Sampling for Hazardous Materials	April 26-27, 2017
Defensive Driving	January 27, 2017
Phase I Environmental Assessments	March 28-29, 2006
Incident Command System (ICS) 100	January 8, 2006
Incident Command System (ICS) 200	January 16, 2006
Incident Command System (ICS) 300	April 3-5, 2006
Incident Command System (ICS) 400	June 8-9, 2006
Applied Environmental Statistics	October 3, 2003
Nuclear, Biological, and Chemical Response	onder Awareness December 13, 2001
RCRA Inspector Institute	May 11-15, 1998
Manager of Landfill Operations Training	July 22-25, 1997
Interview and Interrogation Techniques	December 4-6, 1995
Petroleum Assessment Workshop	May 1-2, 1994
Treatment Technologies for Superfund	(165.3) May 25-28, 1993
Introduction to Ground Water Investiga	tions February 4-6, 1992
Transport and Fate of Contaminants in	the Subsurface June 4-6, 1991
Recognizing and Identifying Hazardous	Materials March 8, 1991
Personnel Protection and Safety - 40 ho	our (165.2) June 18-22, 1990
Risk Assessment Guidance for Superfur	d (165.5) April 16-20, 1990
Sampling for Hazardous Materials (165.	9) March 13-15, 1990

REGULATED SUBSTANCE RESPONSE FUND

DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

CONTACTS:

Hunter Roberts, Secretary Kent Woodmansey, Director

PURPOSE

The money in the Regulated Substance Response Fund is continuously appropriated to provide funding for the cleanup of regulated substance discharges. The Secretary of the Department of Agriculture and Natural Resources may expend funds from the response fund to provide for the costs of investigations, emergency remedial efforts, corrective actions, and managerial or administrative activities associated with such activities.

SUMMARY

In 1988, SDCL 34A-12-3 created the Regulated Substance Response Fund. The fund was created through an appropriation from general fund, a one-time contribution from the petroleum release compensation fund, and a temporary pesticide registration fee.

Ongoing deposits into the fund come from: money recovered by the State in any civil action or administrative proceeding based upon violation of the State's environmental statutes or upon damage to the environment, including actions for administrative expense recoveries, civil penalties, compensatory damages, and money paid pursuant to any agreement, stipulation, or settlement in such actions or proceedings and interest attributable to investment of the money in the response fund.

Before the fund can be used, there must be a discharge of a regulated substance, but then the money is continuously distributed from the fund to pay for the cleanup of regulated substance discharges. The department may file civil actions or liens on property owned by the responsible person to recover costs.

REQUIREMENTS

The Secretary of the Department of Agriculture and Natural Resources may expend funds from the response fund to provide for the costs of investigations, emergency remedial efforts, corrective actions, and managerial or administrative activities associated with such activities. For a substance to be classified as a regulated substance, it must meet the definition set forth in either statute or rule. SDCL 34A-12-1(8) exempts sewage and sewage sludge from being classified as a regulated substance.

The Secretary's use of the response fund is outlined in SDCL 34A-12-4. It provides in pertinent part as follows:

- (1) In the case of an investigation, when the secretary determines that a discharge requiring an emergency remedial effort may have occurred and that the general operating budget of the department is not adequate to cover the costs of the necessary investigatory activities.
- (2) In the case of an emergency remedial effort, when the secretary determines that a discharge has occurred and that the corrective actions shall be immediately undertaken to protect an imminent threat to the public health or safety or to contain a discharge which, if not immediately contained, shall in time pose a significantly greater threat to public health or safety or to contain a discharge which, if not immediately contained, shall in time pose a significantly greater threat to public health or safety or to the environment of this state if such action is not immediately taken;
- (3) In the case of a discharge not of an emergency nature when the secretary determines that a discharge has occurred, that a responsible party or liability fund capable of performing the corrective actions either cannot be identified or refuses to undertake corrective actions, and that corrective actions shall be undertaken to protect the public health, safety, welfare, or environment of the state.

SDCL 34A-12-4.

SDCL 34A-12-12 sets forth that the person who caused the discharge of a regulated substance is strictly liable for the corrective action costs expended by the department. All corrective actions costs expended shall constitute a lien on all property owned by the responsible person.

STATUTES

34A-12-3. Regulated substance response fund established--Purpose--Source of funds--Continuous appropriation--Informational budget--Annual legislative review.

There is hereby established in the state treasury an operating fund to be known as the regulated substance response fund for the purpose of providing funds for the clean up of regulated substance discharges. Funds from the following sources shall be deposited into the response fund:

- (1) Direct appropriations to the response fund from the general fund;
- (2) Money, other than criminal fines assessed in criminal actions, recovered by the state in any action or administrative proceeding based upon violation of the state's environmental statutes or upon damage to the environment, including actions for administrative expense recoveries, civil penalties, compensatory damages, and money paid pursuant to any agreement, stipulation, or settlement in such actions or proceedings;
- (3) Interest attributable to investment of the money in the response fund;
- (4) Money received by the department in the form of gifts, grants, reimbursements, or appropriations from any source intended to be used for the purposes of the response fund.

All money in the response fund is continuously appropriated for the purposes specified in § 34A-12-4. All money received by the department for the response fund shall be set forth in an informational budget pursuant to § 4-7-7.2 and be annually reviewed by the Legislature.

34A-12-4. Expenditure of funds by secretary--Grounds for expenditures.

When necessary in the performance of the secretary's duties under §§ 23A-27-25, 34A-1-39, 34A-2-75, 34A-6-1.4, 34A-6-1.31, 34A-11-9, 34A-11-10, 34A-11-12, 34A-11-14, 34A-12-1 to 34A-12-15, inclusive, 45-6B-70, 45-6C-45, 45-6D-60, and 45-9-68 and Title 34A relative to discharges, the secretary may expend funds from the response fund to provide for the costs of investigations, emergency remedial efforts, corrective actions, and managerial or administrative activities associated with such activities. The secretary's use of the response fund shall be based upon the following:

- (1) In the case of an investigation, when the secretary determines that a discharge requiring an emergency remedial effort may have occurred and that the general operating budget of the department for such purposes is not adequate to cover the costs of the necessary investigatory activities;
- (2) In the case of an emergency remedial effort, when the secretary determines that a discharge has occurred and that corrective actions shall be immediately undertaken to protect an imminent threat to the public health or safety or to contain a discharge which, if not immediately contained, shall in time pose a significantly greater threat to public health or safety or to the environment of this state than if such action is not immediately taken;
- (3) In the case of a discharge not of an emergency nature when the secretary determines that a discharge has occurred, that a responsible party or liability fund capable of performing the corrective actions either cannot be identified or refuses to undertake corrective actions, and that corrective actions shall be undertaken to protect the public health, safety, welfare, or environment of the state.

34A-12-12. Strict liability for costs of corrective action.

Any person who has caused a discharge of a regulated substance in violation of § 34A-12-8 is strictly liable for the corrective action costs expended by the department pursuant to §§ 23A-27-25, 34A-1-39, 34A-12-1 to 34A-12-15, inclusive, 45-6B-70, 45-6C-45, 45-6D-60, and 45-9-68.

CURRENT STATUS

The Department of Agriculture and Natural Resources currently has six (6) contracts in place with environmental consulting firms to provide response capabilities. These contracts are 4-year contracts with extension provisions. Currently the department has contracts with the following firms: GeoTek Engineering & Testing Services (Sioux Falls); Terracon Consultants, Inc.; WSP USA Inc.; Antea Group; Houston Engineering Inc. (Sioux Falls); and American Engineering Testing Services (Pierre and Rapid City).