

BEFORE THE INDUSTRIAL COMMISSION  
OF THE STATE OF NORTH DAKOTA

CASE NO. 30871  
ORDER NO. 33531

IN THE MATTER OF A HEARING CALLED ON A MOTION OF THE COMMISSION TO CONSIDER THE APPLICATION OF SUMMIT CARBON STORAGE #1, LLC FOR AN ORDER OF THE COMMISSION DETERMINING THE AMOUNT OF FINANCIAL RESPONSIBILITY FOR THE GEOLOGIC STORAGE OF CARBON DIOXIDE FROM THE MIDWEST CARBON EXPRESS PIPELINE IN THE STORAGE FACILITY LOCATED IN SECTIONS 31, 32, 33, AND 34, TOWNSHIP 142 NORTH, RANGE 87 WEST, SECTIONS 1, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 35, AND 36, TOWNSHIP 141 NORTH, RANGE 88 WEST, SECTIONS 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, AND 35, TOWNSHIP 141 NORTH, RANGE 87 WEST, SECTIONS 1, 2, 3, AND 12, TOWNSHIP 140 NORTH, RANGE 88 WEST AND SECTIONS 4, 5, 6, AND 7, TOWNSHIP 140 NORTH, RANGE 87 WEST, MERCER, MORTON, AND OLIVER COUNTIES, ND, IN THE BROOM CREEK FORMATION, PURSUANT TO NORTH DAKOTA ADMINISTRATIVE CODE SECTION 43-05-01-09.1.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

(1) This cause came on for hearing at 9:00 a.m. on the 11th of June, 2024. The hearing ran June 11 through June 13, 2024.

(2) Case No. 30871 is a motion of the Commission to determine the amount of financial responsibility required of Summit Carbon Storage #1, LLC (SCS #1) for the geologic storage of carbon dioxide from the Midwest Carbon Express Pipeline (MCE Pipeline) in the storage facility located in Sections 31, 32, 33, and 34, Township 142 North, Range 87 West; Sections 1, 11, 12,

13, 14, 15, 22, 23, 24, 25, 26, 35, and 36, Township 141 North, Range 88 West; Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35, Township 141 North, Range 87 West; Sections 1, 2, 3, and 12, Township 140 North, Range 88 West; and Sections 4, 5, 6, and 7, Township 140 North, Range 87 West, Mercer, Morton, and Oliver Counties, North Dakota, in the Broom Creek Formation, pursuant to North Dakota Administrative Code (NDAC) Section 43-05-01-09.1, and such relief as is appropriate.

(3) Case Nos. 30871, 30869, 30870, 30872, 30873, 30874, 30875, 30876, 30877, 30878, 30879, and 30880 were combined for the purposes of hearing.

(4) Case No. 30869, also heard on the June 11, 2024 docket, is an application by SCS #1 for an order requesting consideration for the geologic storage of carbon dioxide in the Broom Creek Formation from the MCE Pipeline in the storage facility located in Sections 31, 32, 33, and 34, Township 142 North, Range 87 West; Sections 1, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 35, and 36, Township 141 North, Range 88 West; Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35, Township 141 North, Range 87 West; Sections 1, 2, 3, and 12, Township 140 North, Range 88 West; and Sections 4, 5, 6, and 7, Township 140 North, Range 87 West, Mercer, Morton, and Oliver Counties, North Dakota, pursuant to NDAC Chapter 43-05-01.

(5) Case No. 30870, also heard on the June 11, 2024 docket, is a motion of the Commission to consider the amalgamation of storage reservoir pore space, pursuant to a Storage Agreement by SCS #1 for use of pore space falling within portions of Sections 31, 32, 33, and 34, Township 142 North, Range 87 West; Sections 1, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 35, and 36, Township 141 North, Range 88 West; Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35, Township 141 North, Range 87 West; Sections 1, 2, 3, and 12, Township 140 North, Range 88 West; and Sections 4, 5, 6, and 7, Township 140 North, Range 87 West, Mercer, Morton, and Oliver Counties, North Dakota, in the Broom Creek Formation, and to determine it has been signed, ratified, or approved by owners of interest owning at least sixty percent of the pore space interest within said lands, pursuant to North Dakota Century Code (NDCC) Section 38-22-10.

(6) Case No. 30872, also heard on the June 11, 2024 docket, is a motion of the Commission to consider establishing the field and pool limits for lands located in Sections 31, 32, 33, and 34, Township 142 North, Range 87 West; Sections 1, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 35, and 36, Township 141 North, Range 88 West; Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35, Township 141 North, Range 87 West; Sections 1, 2, 3, and 12, Township 140 North, Range 88 West; and Sections 4, 5, 6, and 7, Township 140 North, Range 87 West, Mercer, Morton, and Oliver Counties, North Dakota, subject to the application of SCS #1 for the geologic storage of carbon dioxide in the Broom Creek Formation, and enact such special field rules as may be necessary.

(7) Case No. 30873, also heard on the June 11, 2024 docket, is an application by Summit Carbon Storage #2, LLC (SCS #2) for an order requesting consideration for the geologic storage of carbon dioxide in the Broom Creek Formation from the MCE Pipeline in the storage facility located in Sections 27, 28, 29, 32, 33, 34, and 35, Township 143 North, Range 88 West; Sections

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, and 36, Township 142 North, Range 88 West; Sections 5, 6, 7, 8, 17, 18, 19, 20, 29, 30, and 31, Township 142 North, Range 87 West; and Sections 1, 2, and 3, Township 141 North, Range 88 West, Mercer and Oliver Counties, North Dakota, pursuant to NDAC Chapter 43-05-01.

(8) Case No. 30874, also heard on the June 11, 2024 docket, is a motion of the Commission to consider the amalgamation of storage reservoir pore space, pursuant to a Storage Agreement by SCS #2 for use of pore space falling within portions of Sections 27, 28, 29, 32, 33, 34, and 35, Township 143 North, Range 88 West; Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, and 36, Township 142 North, Range 88 West; Sections 5, 6, 7, 8, 17, 18, 19, 20, 29, 30, and 31, Township 142 North, Range 87 West; and Sections 1, 2, and 3, Township 141 North, Range 88 West, Mercer and Oliver Counties, North Dakota, in the Broom Creek Formation, and to determine it has been signed, ratified, or approved by owners of interest owning at least sixty percent of the pore space interest within said lands, pursuant to NDCC Section 38-22-10.

(9) Case No. 30875, also heard on the June 11, 2024 docket, is a motion of the Commission to determine the amount of financial responsibility required of SCS #2 for the geologic storage of carbon dioxide from the MCE Pipeline in the storage facility located in Sections 27, 28, 29, 32, 33, 34, and 35, Township 143 North, Range 88 West; Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, and 36, Township 142 North, Range 88 West; Sections 5, 6, 7, 8, 17, 18, 19, 20, 29, 30, and 31, Township 142 North, Range 87 West; and Sections 1, 2, and 3, Township 141 North, Range 88 West, Mercer and Oliver Counties, North Dakota, in the Broom Creek Formation, pursuant to NDAC Section 43-05-01-09.1.

(10) Case No. 30876, also heard on the June 11, 2024 docket, is a motion of the Commission to consider establishing the field and pool limits for lands located in Sections 27, 28, 29, 32, 33, 34, and 35, Township 143 North, Range 88 West; Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, and 36, Township 142 North, Range 88 West; Sections 5, 6, 7, 8, 17, 18, 19, 20, 29, 30, and 31, Township 142 North, Range 87 West; and Sections 1, 2, and 3, Township 141 North, Range 88 West, Mercer and Oliver Counties, North Dakota, subject to the application of SCS #2 for the geologic storage of carbon dioxide in the Broom Creek Formation, and enact such special field rules as may be necessary.

(11) Case No. 30877, also heard on the June 11, 2024 docket, is an application by Summit Carbon Storage #3, LLC (SCS #3) for an order requesting consideration for the geologic storage of carbon dioxide in the Broom Creek Formation from the MCE Pipeline in the storage facility located in Section 36, Township 143 North, Range 87 West; Sections 19, 20, 21, 28, 29, 30, 31, 32, 33, 34, 35, and 36, Township 143 North, Range 86 West; Sections 1, 2, 11, 12, 13, 14, and 24, Township 142 North, Range 87 West; Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, and 35, Township 142 North, Range 86 West; and Sections 6, 7, 17, 18, 19, and 20, Township 142 North, Range 85 West, Oliver County, North Dakota, pursuant to NDAC Chapter 43-05-01.

(12) Case No. 30878, also heard on the June 11, 2024 docket, is a motion of the Commission to consider the amalgamation of storage reservoir pore space, pursuant to a Storage Agreement by SCS #3 for use of pore space falling within portions of Section 36, Township 143 North, Range 87 West; Sections 19, 20, 21, 28, 29, 30, 31, 32, 33, 34, 35, and 36, Township 143 North, Range 86 West; Sections 1, 2, 11, 12, 13, 14, and 24, Township 142 North, Range 87 West; Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, and 35, Township 142 North, Range 86 West; and Sections 6, 7, 17, 18, 19, and 20, Township 142 North, Range 85 West, Oliver County, North Dakota, in the Broom Creek Formation, and to determine it has been signed, ratified, or approved by owners of interest owning at least sixty percent of the pore space interest within said lands, pursuant to NDCC Section 38-22-10.

(13) Case No. 30879, also heard on the June 11, 2024 docket, is a motion of the Commission to determine the amount of financial responsibility required of SCS #3 for the geologic storage of carbon dioxide from the MCE Pipeline in the storage facility located in Section 36, Township 143 North, Range 87 West; Sections 19, 20, 21, 28, 29, 30, 31, 32, 33, 34, 35, and 36, Township 143 North, Range 86 West; Sections 1, 2, 11, 12, 13, 14, and 24, Township 142 North, Range 87 West; Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, and 35, Township 142 North, Range 86 West; and Sections 6, 7, 17, 18, 19, and 20, Township 142 North, Range 85 West, Oliver County, North Dakota, in the Broom Creek Formation, pursuant to NDAC Section 43-05-01-09.1.

(14) Case No. 30880, also heard on the June 11, 2024 docket, is a motion of the Commission to consider establishing the field and pool limits for lands located in Section 36, Township 143 North, Range 87 West; Sections 19, 20, 21, 28, 29, 30, 31, 32, 33, 34, 35, and 36, Township 143 North, Range 86 West; Sections 1, 2, 11, 12, 13, 14, and 24, Township 142 North, Range 87 West; Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, and 35, Township 142 North, Range 86 West; and Sections 6, 7, 17, 18, 19, and 20, Township 142 North, Range 85 West, Oliver County, North Dakota, subject to the application of SCS #3 for the geologic storage of carbon dioxide in the Broom Creek Formation, and enact such special field rules as may be necessary.

(15) The record in these matters was left open to receive additional information from SCS #1, SCS #2, and SCS #3. Such information was received on June 24, 2024 and the record was closed.

(16) Several landowners filed petitions to intervene in these combined matters and motions were also filed. The discussion of these is covered in Order Nos. 33529, 33533, and 33537 and are included herein by reference.

(17) Order No. 33529 entered in Case No. 30869 created the TB Leingang Broom Creek Storage Facility; and Order No. 33530 entered in Case No. 30870 determined said storage facility will become effective as provided by subsequent order of the Director of the North Dakota Oil and Gas Division.

(18) SCS #1 outlined its proposed qualifying financial responsibility instruments to be utilized to demonstrate financial responsibility pursuant to NDAC Section 43-05-01-09.1.

(19) Pursuant to NDAC Section 43-05-01-09.1 the qualifying financial responsibility instruments must cover the cost of:

- (a) Corrective action that meets the requirements of NDAC Section 43-05-01-05.1.
- (b) Injection well plugging that meets the requirements of NDAC Section 43-05-01-11.5.
- (c) Postinjection site care and facility closure that meets the requirements of NDAC Section 43-05-01-19.
- (d) Emergency and remedial response that meets the requirements of NDAC Section 43-05-01-13.

(20) SCS #1 demonstrated that corrective action pursuant to NDAC Section 43-05-01-05.1 is not necessary within the delineated area of review. The Commission agrees.

(21) SCS #1 estimates the injection well plugging cost pursuant to NDAC Section 43-05-01-11.5 to be \$1,166,000 for two wells. SCS #1 testified that this amount includes the increased costs for a larger rig to pull the 7-inch tubing string and for CO2 resistant cement. The Commission accepts this estimate.

(22) The TB Leingang Broom Creek Storage Facility will have two injection wells, the TB Leingang #1 well (File No. 40158), located 2,160 feet from the north line and 519 feet from the east line of Section 18, Township 141 North, Range 87 West, Oliver County, North Dakota, and the TB Leingang #2 well (File No. 40178), located 2,260 feet from the north line and 521 feet from the east line of Section 18, Township 141 North, Range 87 West, Oliver County, North Dakota. SCS #1 proposes covering the plugging costs of the two injection wells with a \$1,166,000 surety bond. Bonds are a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1.

(23) SCS #1 estimates the postinjection site care and facility closure financial responsibility pursuant to NDAC Section 43-05-01-19 is \$5,355,000 and is proposed to be covered by a surety bond. The Commission notes two typographical errors were found in Table 12-3a (under Near Surface Monitoring) and the total should be \$5,392,800. The typographical errors resulted in the total costs associated with monitoring during the postinjection phase to be \$4,007,800 rather than the \$3,970,000 as represented in Table 12-3a of the storage facility application.

(24) The postinjection site care and facility closure financial responsibility is proposed to cover the costs associated with monitoring during the postinjection phase, totaling \$4,007,800, the surface reclamation and plugging of one reservoir monitoring well, the Milton Flemmer #1 well (File No. 38594), located 306 feet from the north line and 1,839 feet from the east line of Section 35, Township 141 North, Range 88 West, Mercer County, North Dakota, totaling \$868,500, the

surface reclamation of one injection well pad, shared by the TB Leingang #1 and TB Leingang #2, totaling \$255,000, the proper abandonment of the approximately 8.6-mile flow line, totaling \$243,000, the plugging and surface reclamation of the Fox Hills monitoring well, totaling \$16,000, and the plugging and surface reclamation of two soil gas stations, totaling \$2,500, for a combined total of \$5,392,800.

(25) SCS #1 estimates the emergency and remedial response costs pursuant to NDAC Section 43-05-01-13, by considering a conservative scenario where carbon dioxide migrates to the surface is combined with groundwater interferences. Technical manuscripts by Manceau and others (2014) and Bielicki and others (2014) were used to identify and estimate the costs of mitigation and remediation technologies to address undesired migration of carbon dioxide from a geological storage reservoir. Cost estimates specific to the proposed storage facility's remediation within the area of review were evaluated alongside methodologies and estimates from previously permitted storage facilities.

SCS #1 testified it calculated the cost based on a scenario where the injection well head's integrity failed resulting in a containment loss and the delineation of costs associated with the replacement of underground sources of drinking water (USDWs). SCS #1's estimate for emergency and remedial response actions is \$13,795,000, with \$2,695,000 going toward endangerment of USDWs and is proposed to be covered by a third-party pollution liability insurance policy. The insurance policy is deemed a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1.

(26) The Commission should set minimum amounts of qualifying financial responsibility for injection well plugging, postinjection site care and facility closure, and emergency and remedial response.

IT IS THEREFORE ORDERED:

(1) Summit Carbon Storage #1, LLC, its assigns and successors, is hereby required to maintain financial responsibility with qualifying instruments in the minimum amounts specified in Paragraph (2) below, pursuant to North Dakota Administrative Code (NDAC) Section 43-05-01-09.1, covering the TB Leingang Broom Creek Storage Facility in Mercer, Morton, and Oliver Counties, North Dakota.

(2) The minimum amount for injection well plugging that meets the requirements of NDAC Section 43-05-01-11.5 is \$1,166,000 for two injection wells.

The minimum amount for postinjection site care and facility closure that meets the requirements of NDAC Section 43-05-01-19 is \$5,392,800.

The minimum amount for emergency and remedial response that meets the requirements of NDAC Section 43-05-01-13 is \$13,795,000.

(3) This order shall be reviewed when a review of Order No. 33529 is conducted.

(4) This order shall remain in full force and effect until further order of the Commission.

Dated this 12th day of December, 2024.

INDUSTRIAL COMMISSION  
STATE OF NORTH DAKOTA

/s/ Doug Burgum, Governor

/s/ Drew H. Wrigley, Attorney General

/s/ Doug Goehring, Agriculture Commissioner