

BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 30124
ORDER NO. 32808

IN THE MATTER OF A HEARING CALLED ON A MOTION OF THE COMMISSION TO DETERMINE THE AMOUNT OF FINANCIAL RESPONSIBILITY REQUIRED OF DCC WEST PROJECT LLC FOR THE GEOLOGIC STORAGE OF CARBON DIOXIDE FROM THE MILTON R. YOUNG STATION AND OTHER SOURCES IN THE STORAGE FACILITY LOCATED IN SECTIONS 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 29, 30, 31, AND 32, TOWNSHIP 141 NORTH, RANGE 84 WEST, SECTIONS 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, 24, 25, 26, 27, AND 36, TOWNSHIP 141 NORTH, RANGE 85 WEST, SECTIONS 19, 20, 21, 28, 29, 30, 31, 32, 33, AND 34, TOWNSHIP 142 NORTH, RANGE 84 WEST, AND SECTIONS 24, 25, 33, 34, 35, AND 36, TOWNSHIP 142 NORTH, RANGE 85 WEST, OLIVER COUNTY, NORTH DAKOTA, 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 30th day of June, 2023. The initial public notice of this application was not properly published in the Center Republican, the official Oliver County newspaper. Evidence and testimony were taken on June 30, 2023, but the record in this case was left open until August 7, 2023 to allow the required notice to be published and afford any interested parties the opportunity to appear. No further appearances were made on August 7, 2023.

(2) Case No. 30124 is a motion of the Commission to determine the amount of financial responsibility required of DCC West Project LLC (DCC West) for the geologic storage of carbon dioxide from the Milton R. Young Station (MRYS) and other sources in the storage facility located

in Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 29, 30, 31, and 32, Township 141 North, Range 84 West, Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, 24, 25, 26, 27, and 36, Township 141 North, Range 85 West, Sections 19, 20, 21, 28, 29, 30, 31, 32, 33, and 34, Township 142 North, Range 84 West, and Sections 24, 25, 33, 34, 35, and 36, Township 142 North, Range 85 West, Oliver County, 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. 30124, 30122, 30123, and 30125 were combined for the purposes of hearing.

(4) Case No. 30122, also on the June 30, 2023 docket, is an application by DCC West for an order requesting consideration for the geologic storage of carbon dioxide in the Broom Creek Formation from the MRYS and other sources in the storage facility located in Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 29, 30, 31, and 32, Township 141 North, Range 84 West, Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, 24, 25, 26, 27, and 36, Township 141 North, Range 85 West, Sections 19, 20, 21, 28, 29, 30, 31, 32, 33, and 34, Township 142 North, Range 84 West, and Sections 24, 25, 33, 34, 35, and 36, Township 142 North, Range 85 West, Oliver County, North Dakota, pursuant to NDAC Chapter 43-05-01.

(5) Case No. 30123, also on the June 30, 2023 docket, is a motion of the Commission to consider the amalgamation of storage reservoir pore space, pursuant to a Storage Agreement by DCC West for use of pore space falling within portions of Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 29, 30, 31, and 32, Township 141 North, Range 84 West, Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, 24, 25, 26, 27, and 36, Township 141 North, Range 85 West, Sections 19, 20, 21, 28, 29, 30, 31, 32, 33, and 34, Township 142 North, Range 84 West, and Sections 24, 25, 33, 34, 35, and 36, 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 North Dakota Century Code (NDCC) Section 38-22-10.

(6) Case No. 30125, also on the June 30, 2023 docket, is a motion of the Commission to consider establishing the field and pool limits for lands located in Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 29, 30, 31, and 32, Township 141 North, Range 84 West, Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, 24, 25, 26, 27, and 36, Township 141 North, Range 85 West, Sections 19, 20, 21, 28, 29, 30, 31, 32, 33, and 34, Township 142 North, Range 84 West, and Sections 24, 25, 33, 34, 35, and 36, Township 142 North, Range 85 West, Oliver County, North Dakota, subject to the application of DCC West for the geologic storage of carbon dioxide in the Broom Creek Formation, and enact such special field rules as may be necessary.

(7) The record in these matters was left open to receive additional information from DCC West. Such information was received on August 18, 2023, and the record was closed.

(8) Order No. 32806 entered in Case No. 30122 created the DCC West Center Broom Creek Storage Facility #1; and Order No. 32807 entered in Case No. 30123 determined said storage facility will become effective November 1, 2023.

(9) DCC West outlined its proposed qualifying financial responsibility instruments to be utilized to demonstrate financial responsibility pursuant to NDAC Section 43-05-01-09.1.

(10) 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.

(11) DCC West 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.

(12) DCC West estimates the injection well plugging cost pursuant to NDAC Section 43-05-01-11.5 to be \$2,215,000 for two wells. DCC West testified that this amount includes the abandonment of the flow line, estimated to be \$400,000. The Commission accepts this estimate.

(13) The DCC West Center Broom Creek Storage Facility #1 will have two injection wells, the proposed IIW-N well, to be located approximately 1,008 feet from the south line and 402 feet from the east line of Section 6, Township 141 North, Range 84 West, Oliver County, North Dakota, and the proposed IIW-S well, to be located approximately 908 feet from the south line and 402 feet from the east line of Section 6, Township 141 North, Range 84 West, Oliver County, North Dakota. DCC West proposes covering the plugging of the two injection wells, including flow line abandonment costs, with a trust fund with initial funding of \$2,215,000, within seven days of authorization to inject, and paying an additional \$13,617,000 in seven equal installments on or before each successive anniversary of injection, totaling \$15,832,000. Trust funds are a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1. The Commission should require the initial funding of \$2,215,000 to be in place prior to commencing injection pursuant to NDAC Section 43-02-03-15(9).

(14) DCC West estimates the postinjection site care and facility closure financial responsibility pursuant to NDAC Section 43-05-01-19 is \$13,617,000 and is proposed to be covered by the previously stated trust fund of \$15,832,000. The trust fund is a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1.

(15) The postinjection site care and facility closure financial responsibility is proposed to cover the costs associated with monitoring during the postinjection phase, the surface reclamation and plugging of two reservoir monitoring wells, one being the J-LOC #1 (File No. 37380) well, located 1,373 feet from the north line and 2,515 feet from the east line from Section 27, Township 142 North, Range 84 West, Oliver County, North Dakota, and the surface reclamation of one well pad, shared by the proposed IIW-N and IIW-S injection wells. The plugging and surface reclamation of the two Fox Hills monitoring wells were not accounted for and were assumed to remain in place.

(16) DCC West estimates the emergency and remedial response costs pursuant to NDAC Section 43-05-01-13, by considering a conservative scenario where carbon dioxide migration to the surface 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. DCC West testified they calculated the costs of both a full shearing of the injection wellhead scenario, resulting in a blowout and release at surface, and USDW endangerment from a vertical leak scenario migrating up the wellbore, and selected the higher of the two, which was the well blowout scenario. DCC West's estimate for emergency and remedial response actions is \$14,269,000 and is proposed to be covered by a third-party insurance policy. The insurance policy is deemed a qualifying financial responsibility instrument under NDAC Section 43-05-01-09.1.

(17) 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) DCC West Project 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 NDAC Section 43-05-01-09.1, covering the DCC West Center Broom Creek Storage Facility #1 in Oliver County, North Dakota.

(2) The minimum amount for injection well plugging that meets the requirements of NDAC Section 43-05-01-11.5 is \$2,215,000 for two injection wells.

(3) The minimum amount for postinjection site care and facility closure that meets the requirements of NDAC Section 43-05-01-19 is \$13,617,000.

(4) The minimum amount for emergency and remedial response that meets the requirements of NDAC Section 43-05-01-13 is \$14,269,000.

(5) This order shall be reviewed when a review of Order No. 32806 is conducted.

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

Dated this 4th day of October, 2023.

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA

/s/ Doug Burgum, Governor

/s/ Drew H. Wrigley, Attorney General

/s/ Doug Goehring, Agriculture Commissioner