

FILED

Aug 13, 2025

9:03 am

**U.S. EPA REGION 5
HEARING CLERK**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

In the Matter Of:)	Docket No. SDWA-05-2025-0001
)	
Archer-Daniels-Midland Company)	
Decatur, Illinois)	Proceeding under Section 1423(c)
)	of the Safe Drinking Water Act,
Respondent.)	42 U.S.C. § 300h-2(c)
)	

ADMINISTRATIVE ORDER ON CONSENT

1. The Director of the Enforcement and Compliance Assurance Division, U.S. Environmental Protection Agency (“EPA”), Region 5, is issuing this Administrative Order on Consent (“Order” or “AOC”) to Archer-Daniels-Midland Company (“Respondent” or “ADM” or “you”) pursuant to Section 1423(c)(1) of the Safe Drinking Water Act (“SDWA”), 42 U.S.C. § 300h-2(c)(1).
2. The Administrator of EPA has delegated the authority to issue such orders to the Regional Administrator of EPA Region 5, who has redelegated this authority to the Director of the Enforcement and Compliance Assurance Division, EPA Region 5.
3. Respondent consents to the terms of the AOC, including the performance of the compliance requirements specified below.
4. For the purposes of this AOC, Respondent admits the jurisdictional allegations of the AOC; neither admits nor denies the specific factual allegations contained in the AOC; and consents to any conditions specified in the Order.

I. Statutory and Regulatory Background

5. Section 1421 of the SDWA, 42 U.S.C. § 300h, requires that the Administrator of EPA promulgate regulations, which shall include permitting requirements as well as inspection, monitoring, recordkeeping, and reporting requirements, for state underground injection control (“UIC”) programs to prevent unauthorized underground injections and underground injections that endanger drinking water sources.

6. Section 1421(d)(1) of the SDWA, 42 U.S.C. § 300h(d)(1), defines “underground injection” as the subsurface emplacement of fluids by well injection and excludes the underground injection of natural gas for purposes of storage and the underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities.

7. Section 1421(d)(2) of the SDWA, 42 U.S.C. § 300h(d)(2), provides that underground injection endangers drinking water sources if such injection may result in the presence in underground water which supplies or can reasonably be expected to supply any public water system of any contaminant, and if the presence of such contaminant may result in such system not complying with any national primary drinking water regulation or may otherwise adversely affect the health of persons.

8. Pursuant to Section 1422(b) of the SDWA, 42 U.S.C. § 300h-1(b), designated states shall apply to obtain primary enforcement responsibility of their UIC programs (a concept called “primacy”).

9. Section 1422(c) of the SDWA, 42 U.S.C. § 300h-1(c), provides that the Administrator of EPA shall by regulation prescribe UIC programs applicable to those states that have not obtained primacy for their UIC programs or do not have primacy for all types of wells.

10. Pursuant to Sections 1421 and 1422 of the SDWA, 42 U.S.C. §§ 300h and 300h-1, respectively, EPA has promulgated regulations for the UIC programs at 40 C.F.R. Parts 124 and 144 through 148.

11. The SDWA and its regulations prohibit all underground injections unless authorized by a permit or a rule. 42 U.S.C. § 300h(b)(1)(A); 40 C.F.R. § 144.11.

12. EPA administers and has primary enforcement responsibility of the Class VI UIC program in the State of Illinois.

13. Pursuant to 40 C.F.R. § 144.1(g), the UIC programs regulate underground injection by six classes of wells and all owners or operators of these wells must obtain authorization for their injections either by permit or rule. Class VI wells are, *inter alia*, wells that are not experimental in nature that are used for geologic sequestration of carbon dioxide beneath the lowermost formation containing an underground source of drinking water (“USDW”). 40 C.F.R. 144.6(f).

14. 40 C.F.R. 146, subpart H establishes criteria and standards for underground injection control programs to regulate any Class VI carbon dioxide geologic sequestration injection wells.

15. In accordance with 40 C.F.R. § 144.51(a), any UIC permittee must comply with all conditions of its permit which include the requirements set forth in 40 C.F.R. §§ 144.11-144.19. Any permit noncompliance constitutes a violation of the SDWA, except that the permittee need

not comply with the provisions of its permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 C.F.R. § 144.34.

16. In accordance with 40 C.F.R. § 146.86(a), the owner or operator must ensure that all Class VI wells are constructed and completed to, *inter alia*: prevent the movement of fluids into or between USDWs or into any unauthorized zones.

17. Section 1423(a)(2) of the SDWA, 42 U.S.C. § 300h-2(a)(2), authorizes EPA to order any person found to be in violation of any requirement of an applicable UIC program to comply with such requirement or regulation pursuant to Section 1423(c)(1) of the SDWA, 42 U.S.C. § 300h-2(c)(1).

II. Factual Allegations and Alleged Violations

18. Respondent is Archer-Daniels-Midland Company, a corporation, doing business in Illinois, and as such, Respondent is a “person” as that term is defined at Section 1401(12) of the SDWA, 42 U.S.C. § 300f(12), and 40 C.F.R. § 144.3.

19. EPA issued Permit No. IL-115-6A-0001 (the “Permit”) to Respondent to construct and operate an underground injection well located in Decatur, Macon County, Illinois, commonly known as CCS#2 pursuant to the Permit. Permit No. IL-115-6A-0001, effective on April 7, 2017, and amended on December 20, 2021, applied to Respondent’s operation of CCS#2 at all times relevant to this AOC.

20. The Permit authorizes Respondent for the underground injection of the Carbon Dioxide (CO₂) stream generated by ADM’s fuel ethanol production unit and as characterized in the permit application and the administrative record as a liquid, supercritical fluid, or gas (the “CO₂ stream”) into the CCS#2 well (the “Well”) into the Mount Simon formation at depths

between 5,553 feet and 7,043 feet below ground surface, and below the designated confining zone for this injection (the Eau Claire formation), subject to the terms and conditions set forth in the Permit.

21. Section A of the Permit states that the permittee authorized by this permit shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of injection, annulus or formation fluids into USDWs or any unauthorized zones.

22. The Ironton-Galesville formation is shallower than the confining Eau Claire formation and constitutes an unauthorized zone, as described in Section A of the Permit.

23. Section F(1) of the Permit provides that the permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the SDWA and is grounds for, *inter alia*, enforcement action.

24. The CO₂ stream is a “fluid” because it is a material or substance that flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or state. 40 C.F.R. § 144.3.

25. The subsurface emplacement of the CO₂ stream through the CCS#2 well is a “well injection.” 40 C.F.R. § 144.3.

26. Respondent’s facility located in Decatur, Macon County, Illinois, is a facility or activity as defined by 40 C.F.R. § 144.3 because it is a UIC “injection well,” or another facility or activity that is subject to regulation under the UIC program.

27. At all times relevant to this AOC, Respondent owned and operated an injection well in the State of Illinois and therefore was subject to the UIC program requirements set forth at 40 C.F.R. Parts 124, 144, 146, 147 and 148.

28. Respondent did not apply for and obtain an emergency permit for the well identified in paragraph 19 pursuant to 40 C.F.R. § 144.34.

29. Attachment C of the Permit requires, *inter alia*, two deep monitoring wells, Verification Well #1 (VW#1) and Verification Well #2 (VW#2).

30. On June 12 and 13, 2024, pursuant to Section 1445(b) of the SDWA, 42 U.S.C. § 300j-4(b), and 40 C.F.R. § 144.51(i) as reflected in Section (F)(8) of the Permit, EPA inspected Respondent's facility located in Decatur, Macon County, Illinois.

31. On June 18, 2024, Region 5 Water Division sent Respondent a Request to Provide Information pursuant to Section 1445(a) of the SDWA, 42 U.S.C. § 300j-4(a), 40 C.F.R. § 144.17, and 40 C.F.R. § 144.51(h), as reflected in Section (F)(7) of the Permit ("1445 Request"), requesting information and records related to underground injection wells owned and operated by Respondent.

32. On July 22, 2024, EPA received a partial response to the 1445 Request from Respondent.

33. On July 31, 2024, EPA received a semi-annual monitoring report from Respondent – as required by Section N(2) of the Permit ("July 2024 Report").

34. On August 5, 2024, EPA received a complete response to the 1445 Request from Respondent.

35. On August 12, 2024, EPA provided its report of the June 12 and 13, 2024 inspection to Respondent.

36. In the July 2024 Report, Respondent stated that "[i]n March 2024, ADM began producing formation fluid from Zone 5, the Ironton[-]Galesville formation just above the

Confining Zone.” “The fluid properties confirmed for the first time that Zone 2 [Mount Simon formation] fluid was being produced from Zone 5 [Ironton-Galesville formation].”

37. In the July 2024 Report, Respondent stated that “sampling conducted in 2024 for VW[#]2, a well monitoring the injection reservoir and the zone directly above the primary reservoir seal, indicated that Mt. Simon brine and inject[ed] CO₂ have migrated into the Ironton-Galesville formation through the well and the fluid quality in the Ironton-Galesville in the vicinity of VW[#]2 has significantly changed.”

38. ADM stated in its July 2024 Report that the “movement of fluid from the Mt. Simon to the Ironton-Galesville was caused by corrosion to the tubing [used to sample] in VW#2 that created holes sufficient to allow that movement.”

39. On August 14, 2024, EPA issued a Notice of Violation and Opportunity to Confer (“NOV”) to Respondent. This notification requested a written response from Respondent.

40. On August 14, 19, and 22, 2024, EPA and Respondent discussed the areas of concern identified in the August 2024 NOV.

41. On August 22, 2024, EPA received a written response to the August 2024 NOV from Respondent.

42. EPA posted a proposed AOC for public notice and comment pursuant to Section 1423(c)(3) of the SDWA, 42 U.S.C. § 300h-2(c), on September 19, 2024 (the “Proposed AOC”). The public comment period for the Proposed AOC closed on October 21, 2024.

43. On September 27, 2024, ADM submitted a report (“September 27 Report”) to EPA stating that ADM “recently conducted a noise survey at deep monitoring well VW#1.

Preliminary data received this week (Tuesday) indicated potential brine (salty water) movement between different formations at a depth of approximately 5,000 feet.”

44. In the September 27 Report, ADM stated that it had “temporarily paused injection of CO₂ at injection well CCS#2 as a proactive measure,” while ADM conducts further diagnostic testing to help “develop viable response options.”

45. On December 19, 2024, ADM submitted a Proposal for Alternative Monitoring Plan and Request for Minor Modification (“Proposed Monitoring Plan”) to EPA, stating that Modular Sonic Imaging (“MSI”) logging within VW#1 had “detected several noise signatures that indicated intermittent fluid movement through the hydraulically actuated sliding sleeves, a tubing defect at 5264 ft, potential fluid flow across the Zone 3 lower packer, and a potential tubing defect at 1735 ft.” The Proposed Monitoring Plan also stated that the VW#1 RPM log indicated “changes in fluid saturation at an interval between 5308-5312 ft. This indicates possible fluid migration in the annular space or formation associated with the 9.625” casing shoe and/or other well components[.]”

46. On April 22, 2025, ADM submitted an updated Proposal for Alternative Monitoring Plan (“Updated Monitoring Plan”) pursuant to the Emergency and Remedial Response Plan, Attachment F of the Permit, to EPA which replaced the Proposed Monitoring Plan.

47. On May 31, 2025, ADM submitted the Groundwater Compliance Report prepared by the Illinois State Geological Survey with groundwater results that stated that ADM’s purging efforts for VW#1 Zone 3 (the Ironton-Galesville formation) were effective in

removing the migrated fluids, as constituent concentrations were close to baseline levels previously observed in that zone.

48. During and after the public comment period for the Proposed AOC referenced in paragraph 42, Respondent began to implement compliance requirements described in the Proposed AOC in coordination with EPA, including submitting information regarding the Migration Assessment Report, Corrective Action Plan, and Remedial Action Plan.

Construction, Operation, Maintenance, Plugging, or Conducting any other Injection Activity in a Manner that Allowed the Movement of Injection and Formation Fluids into Any Unauthorized Zones.

49. EPA incorporates paragraphs 1 through 48 of this Order as if set forth in this paragraph.

50. Section A of the Permit requires that Respondent shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of injection, annulus or formation fluids into USDWs or any unauthorized zones.

51. Respondent's Permit only authorizes injection into the Mount Simon formation with the confining zone for this injection designated as the Eau Claire formation.

52. The Ironton-Galesville formation is shallower than the confining Eau Claire formation and is an unauthorized zone for CO₂ injectate and formation fluid from the Mount Simon formation.

53. As articulated in the July 2024 Report, the properties of the fluid ADM produced in March 2024 confirmed that injection and formation fluid from the Mount Simon moved into an unauthorized zone – namely the Ironton-Galesville formation just above the confining zone.

54. The Permit does not identify a confining zone between the Ironton-Galesville and the lowest USDW – the St. Peter formation.

55. ADM stated in its July 2024 Report that the “movement of fluid from the Mt. Simon to the Ironton-Galesville was caused by corrosion to the tubing in VW#2 that created holes sufficient to allow that movement.”

56. ADM’s Proposed Monitoring Plan states that in VW#1 there were indications of “possible fluid migration in the annular space or formation[.]”

57. Respondent’s failure to construct, operate, maintain, plug, or conduct any other injection activity in a manner that does not allow movement of injection and formation fluids into an unauthorized zone constitutes a violation of the provisions of the Permit, a violation of 40 C.F.R. §§ 144.11, 144.51(a), and a violation of Sections 1421 and 1422 of the SDWA, 42 U.S.C. §§ 300h, and 300h-1.

Failure to Monitor the Well in Accordance with the Permit

58. EPA incorporates paragraphs 1 through 57 of this Order as if set forth in this paragraph.

59. 40 C.F.R. § 146.90 provides that the owner or operator of a Class VI well must prepare, maintain, and comply with a testing and monitoring plan to verify that the geologic sequestration project is operating as permitted and is not endangering USDWs.

60. Section M(1) of the Permit provides that the permittee shall maintain and comply with the approved Testing and Monitoring Plan (Attachment C of the Permit) and with the requirements of 40 C.F.R. §§ 144.51(j), 146.88(e), and 146.90. The Testing and Monitoring Plan is an enforceable condition of the Permit.

61. Section M(5) of the Permit provides that the permittee shall monitor ground water quality and geochemical changes above the confining zone(s) that may be a result of carbon dioxide movement through the confining zone(s) or additional identified zones. This monitoring shall be performed for the parameters identified in the Testing and Monitoring Plan at the locations and depths, and at frequencies described in the Testing and Monitoring Plan to meet the requirements of 40 C.F.R. 146.90(d).

62. ADM is currently able to conduct the following testing and monitoring:

(a) Direct monitoring of groundwater quality and geochemical changes above the confining zone by:

- i. In the Quaternary and/or Pennsylvanian strata: Semi-annual fluid sampling from shallow groundwater monitoring wells and continuous distributed temperature sensing (“DTS”) in CCS#1 and CCS#2;
- ii. In the St. Peter: Annual fluid sampling at Geophysical Monitoring Well #2 (“GM#2”), continuous pressure/testing monitoring at GM#2, and continuous DTS at CCS#1 and CCS#2;
- iii. In the Ironton-Galesville: Annual fluid sampling from VW#2, and continuous DTS at CCS#1 And CCS#2;

(b) Direct plume monitoring in the Mount Simon by annual fluid sampling at VW#1;

(c) Pressure-front monitoring activities by:

- i. Direct pressure-front monitoring in the Mount Simon by continuous pressure/temperature monitoring at CCS#1 and CCS#2 and DTS at CCS#1 and CCS#2;

- ii. Other plume/pressure-front monitoring by continuous passive seismic monitoring and pulse neutron logging in multiple formations.

63. ADM's August 5, 2024, response to the 1445 Request explains that "ADM is utilizing data acquired from the monitoring activities at VW#1 to detect any anomalies that would indicate the movement of fluids or CO₂ out of the injection zone." ADM also explained that "using VW#1 as an alternate monitoring well for CCS#2 is fully supported by the data recorded during the last monitoring period when the downhole gauges were functional."

64. Attachment C: Testing and Monitoring Plan of the Permit provides that VW#2 is used for, *inter alia*:

- (a) Direct monitoring of groundwater quality and geochemical changes above the confining zone by conducting annual fluid sampling and continuous pressure/temperature monitoring in the Ironton-Galesville formation.
- (b) Direct plume monitoring activities by conducting annual fluid sampling in the Mount Simon formation.
- (c) Direct pressure-front monitoring activities by conducting continuous pressure/temperature monitoring in the Mount Simon formation.

65. The July 2024 Report states that:

- (a) Due to completion equipment and electrical malfunctioning at VW#2, the downhole pressure and temperature gauges are no longer operational and no downhole data was recorded in the January 1, 2024, to July 1, 2024, reporting period;

- (b) Two plugs were set into VW#2 to isolate the Ironton-Galesville from the lower Mount Simon zones, and current site above-zone and in-zone monitoring will continue at VW#1;
- (c) During the January 1, 2024, to July 1, 2024, reporting period, sampling from VW#2 did not occur due to mechanical issues affecting well operation at multiple sampling zones; and
- (d) Annual fluid sampling activities are suspended for the Mount Simon sampling zones in VW#2 because only the Ironton-Galesville zone is available for sampling and deeper zones have been plugged.

66. Respondent's failure to conduct testing and monitoring at VW#2 as required by its Testing and Monitoring Plan are violations of the provisions of the Permit, 40 C.F.R. §§ 144.11, 144.51(a) and 146.90, and violations of Sections 1421 and 1422 of the SDWA, 42 U.S.C. §§ 300h, and 300h-1.

III. Compliance Requirements

67. Pursuant to Section 1423(c)(1) of the SDWA, 42 U.S.C. § 300h-2(c)(1), Respondent shall:

- (a) Submit, on the effective date of this AOC, a description of the Response Actions identified in (i) and (ii) below that have been completed in accordance with the Emergency and Remedial Response Plan, Attachment F of the Permit, for a Well Integrity Failure of VW#2 and VW#1, with additional appropriate measures. In addition, ADM shall continue performing these Response Actions as necessary:

- i. Monitor well pressure, temperature, and annulus pressure with surface gauges to verify integrity was restored and determine the cause and extent of failure; and
- ii. Identify and implement appropriate remedial actions to repair damage to the wells (in consultation with the UIC Program Director), including implementing the Updated Monitoring Plan, as may be subsequently amended in consultation with the UIC Program Director.

(b) On the effective date of this AOC, submit a Status Report describing:

- i. The cause and extent of the failure of VW#2 and VW#1;
- ii. All steps taken to limit fluid migration from the injection zone to the Ironton-Galesville formation through VW#2 and VW#1;
- iii. Whether VW#2 and VW#1 are the only conduits through which fluid migrates or has migrated from the injection zone into the Ironton-Galesville formation and the basis for this conclusion; and
- iv. Whether fluid continues to migrate from the injection zone to the Ironton-Galesville formation through VW#2, VW#1, or any other known perforation, and the basis for this conclusion.

(c) On the effective date of this AOC, Respondent shall submit, for EPA review and approval pursuant to paragraphs 75 to 78 of this AOC, the Migration Assessment Report, including information previously submitted to EPA, that describes the process, including analytical methods, computational modeling, assumptions, data inputs, and data gaps, by which Respondent determined the extent of fluid

migration from the Mount Simon formation into the Ironton-Galesville formation or otherwise outside the authorized injection zone from and through VW#2 (the “Migrated Fluids”). The report shall describe how the Migration Assessment followed the requirements of 40 C.F.R. § 146.84 and the Permit for an evaluation similar to an area of review evaluation conducted in 40 C.F.R. § 146.84 but specific to the Migrated Fluids. The report shall include the timeline for when the specific steps included in the Migration Assessment were completed.

- (d) The Migration Assessment Report shall also include, but not be limited to:
- i. Computational modeling accounting for the physical and chemical properties of all phases of the Migrated Fluids;
 - ii. The method for delineating the Migration Assessment area of review for the Migrated Fluids that meets the requirements of 40 C.F.R. § 146.84(c), including the model used, assumptions made, and the site characterization data on which the model was based;
 - iii. A prediction, using existing site characterization, monitoring and operational data, and computational modeling, of the projected lateral and vertical migration of the Migrated Fluids plume in the subsurface until the plume movement ceases, or until pressure differentials sufficient to cause the movement of the Migrated Fluids into a USDW are no longer present, or until the end of a fixed period identified in the Migration Assessment Report. The model must:

1. Be based on detailed geologic data collected to characterize the injection zone, confining zone, Ironton-Galesville formation, St. Peter formation, and any additional zones included in the modeling; and anticipated operating data, including injection pressures, rates, and total volumes over the proposed life of the geologic sequestration project;
 2. Take into account any geologic heterogeneities, other discontinuities, data quality, and their possible impact on model predictions; and
 3. Consider potential migration through faults, fractures, and artificial penetrations.
- iv. Using the geographical area for the Migrated Fluids identified in the Migration Assessment Report, identify all penetrations, including active and abandoned wells and underground mines, in the Migration Assessment area of review for the Migrated Fluids that may penetrate the zones that may contain Migrated Fluids. Provide a description of each well's type, construction, date drilled, location, depth, and record of plugging and/or completion;
- v. Determine which abandoned wells in the Migration Assessment area of review of the Migrated Fluids have been plugged in a manner that prevents the movement of carbon dioxide or other fluids that may endanger USDWs, including use of materials compatible with the Migrated Fluids and carbon dioxide stream;

- vi. Identify all wells in the Migration Assessment area of review for the Migrated Fluids that require corrective action due to the Migrated Fluids;
 - vii. Provide a summary of all modeling inputs and data used in preparation of the Migration Assessment Report. Upon EPA request, provide requested modeling inputs and data used in preparation of the Migration Assessment Report.
- (e) On the effective date of this AOC, Respondent shall submit, for EPA review and approval pursuant to paragraphs 75 to 78 of this AOC, the Corrective Action Plan, including information previously submitted to EPA. The Corrective Action Plan shall describe the plan and schedule used to perform corrective actions on all wells in the Migration Assessment area of review for the Migrated Fluids that were determined in the Migration Assessment Report to need corrective action, using methods designed to prevent the movement of fluid into or between USDWs, including use of materials compatible with the Migrated Fluids, where appropriate.
- (f) Upon EPA approval of the Corrective Action Plan, Respondent shall implement any portions of the approved Corrective Action Plan that Respondent has not previously completed in accordance with the approved schedule.
- (g) Respondent shall take the following actions to identify and implement appropriate remedial actions to address the Migrated Fluids:
 - i. On the effective date of this AOC, Respondent shall submit a Remedial Action Plan for EPA review and approval pursuant to paragraphs 75 to 78 of the AOC evaluating each appropriate remedial action alternative to address the Migrated

Fluids, including information previously submitted to EPA on July 28, 2025. The Remedial Action Plan shall include, but not be limited to:

1. For each evaluated remedial action alternative, a description of:
 - a. the remedial action alternative's effectiveness in preventing endangerment of any USDW;
 - b. long-term effectiveness;
 - c. the degree to which the remedial action alternative removes the Migrated Fluids;
 - d. the degree to which the remedial action alternative restrains the Migrated Fluids from any further migration;
 - e. the testing and monitoring procedures Respondent will use to confirm the effectiveness of the remedial action alternative to address the Migrated Fluids and the accuracy of the Migration Assessment Report modeling pursuant to paragraphs 67(c) and (d);
 - f. the technical feasibility of the remedial action alternative;
 - g. any potential adverse environmental impacts of the remedial action alternative;
 - h. any appropriate interim actions for the remedial action alternative;
 - i. a detailed schedule and milestones for the remedial action alternative; and

- j. estimated costs of the remedial action alternative. The cost estimates shall not, however, be considered an enforceable part of the EPA-approved remedial action, nor otherwise be construed as a limit on the cost of the actions Respondent must take to implement the EPA-approved remedial action.
 - 2. An evaluation of a potential remedial action alternative of removing the Migrated Fluids from the unauthorized zone. In addition to the information outlined in paragraph 67(g)(i)(1), this evaluation shall include identification of any potential surface and subsurface consequences of removal, quantity of fluid to be removed, and potential activities for storage and disposal of removed fluids.
 - 3. Identification of Respondent's proposed remedial action alternative to address the Migrated Fluids.
- ii. Respondent shall implement the EPA-approved Remedial Action alternative from the EPA-approved Remedial Action Plan to address the Migrated Fluids, in accordance with the approved schedule and milestones.
- (h) On the effective date of this AOC, Respondent shall establish and maintain a publicly accessible webpage where Respondent shall post compliance summaries for each submission required by paragraphs 67(a) through 67(e) and 67(g)(i) of this AOC for public view. If a summary contains information Respondent claims is confidential business information, as described in paragraph 72, or personal privacy information, as described in paragraph 73, Respondent may prepare and post a redacted version

of the summary by removing any confidential business information or personal privacy information before posting on the webpage. Respondent shall maintain this webpage with all summaries posted until at least termination of this Order pursuant to paragraphs 99 or 100.

- (i) Within 90 days of the effective date of this AOC, Respondent shall submit any permit applications, notifications, or modification requests necessary to (i) address the alleged violations articulated in this AOC; (ii) incorporate any Response Actions to the extent necessary to address the Migrated Fluids; and (iii) fulfill any of the Compliance Requirements articulated in this AOC, including, but not limited to, amending Attachment C: Testing and Monitoring Plan. Respondent may seek additional time to submit applications, notifications and requests under this paragraph 67(i) if reasonably necessary, consistent with the goals of the AOC, and approved by EPA.

IV. DOCUMENTATION AND SUBMISSION

68. Respondent must submit a status report to EPA on the fifteenth day after every other calendar month following the effective date until this AOC is terminated. Each status report must include: (a) a description of the actions that have been taken towards achieving compliance with this AOC during the previous two months, including an assessment of milestones due, whether they were met, and, if not, what actions will be taken or planned to meet the milestones, the timeline for meeting those milestones, and any impact on future milestones; (b) an assessment of the effectiveness of such actions; (c) a summary of all Permit

violations that occurred in the previous two months; and (d) an analysis of the cause of each such Permit violation.

69. To the extent possible, Respondent must electronically submit all reports, notifications, documentation, submissions, and other correspondence required to be submitted by this AOC to EPA. Electronic submissions must be sent to the following addresses: adamiec.james@epa.gov, R5WECA@epa.gov and dooley.carlene@epa.gov. If electronic submittal is not possible, the submissions must be made by certified mail (return receipt requested) and mailed to the following addresses:

James Adamiec (ECW-15J)
Water Enforcement and Compliance Assurance
Branch
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

Carlene Dooley (C-14J)
Office of Regional Counsel
U.S. Environmental Protection Agency, Region 5
77 W. Jackson Boulevard
Chicago, Illinois 60604

Regional Hearing Clerk (E-19J)
U.S. Environmental Protection Agency, Region 5
77 W. Jackson Boulevard
Chicago, Illinois 60604

70. Respondent must provide all electronic documents submitted pursuant to this AOC in unsecured, accessible, searchable format as a Portable Document Format (PDF) or electronic spreadsheet. Respondent must create a document index that clearly identifies any

single electronic document that has been separated into multiple electronic files (because of size limitation or otherwise) and each component file that comprises the full document.

71. Reports, notifications, documentation, and submissions must be signed by a duly authorized representative of Respondent and shall include the following statement consistent with 40 C.F.R. § 144.32(d):

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

72. Respondent may not withhold information based on a claim that it is confidential. However, pursuant to 40 C.F.R. Part 2, Subpart B, Respondent may assert a claim of business confidentiality regarding any portion of the information submitted in response to this AOC, as provided in 40 C.F.R. § 2.203 by placing on (or attaching to) the information, at the time it is submitted to EPA, a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as trade secret, proprietary, or company confidential. Allegedly confidential portions of otherwise non-confidential documents should be clearly identified by the business and may be submitted separately to facilitate identification and handling by EPA. If the business desires confidential treatment only until a certain date or until the occurrence of a certain event, the notice should so state. The failure to furnish a confidentiality claim with your response may result in the information being made available to the public without further notice to you. EPA's confidential business information (CBI) regulations are at 40 C.F.R. Part 2, Subpart B.

73. Respondent should segregate any personnel, medical and similar files from their responses and include that information on a separate sheet(s) marked as “Personal Privacy Information.” Disclosure of such information to the general public may constitute an invasion of privacy.

74. If Respondent finds at any time after submitting information that any portion of that information is false or incorrect, the signatory must notify EPA immediately. Knowingly submitting false information to EPA in response to this AOC may subject Respondent to criminal prosecution under Section 1423(b) of the SDWA, 42 U.S.C. § 300h-2(b), as well as 18 U.S.C. §§ 1001 and 1519.

75. Submissions required by this AOC shall be deemed submitted on the date they are sent electronically or on the date postmarked if sent by U.S. mail.

76. After review of the submissions required pursuant to paragraph 67 of this AOC, EPA may approve or disapprove the submissions, in whole or in part. EPA will approve the submission or any portion so long as the submission fulfills the requirements under this AOC.

77. If EPA disapproves the submission(s), EPA will notify Respondent in writing, which may include notice by email, and EPA may require Respondent to supplement or modify its submission(s). Within 30 days following receipt of written notice of EPA’s disapproval, Respondent must submit a corrected submission to EPA for approval. In the event that Respondent’s modified submission is disapproved in whole or in part by EPA, EPA may require Respondent to correct the deficiencies or EPA may determine that the submission fails to meet the requirements of this AOC.

78. Respondent may object in writing to the notice of disapproval within 10 days of receiving the notice, and the parties will have 30 days from EPA's receipt of Respondent's objection to reach an agreement. If the parties cannot reach an agreement, EPA will give Respondent a written decision on the objection, which may require Respondent to correct, modify or supplement its submission(s). If Respondent fails to undertake these corrections as required by EPA, EPA may determine that the submission fails to meet the requirements of this AOC.

79. Notwithstanding the receipt of a notice of disapproval pursuant to paragraph 78, above, Respondent must proceed to take all actions and provide all submissions required under this AOC, including any actions required under any non-deficient portion(s) of its submission, if such action can be undertaken independent of the deficient portion of Respondent's submission.

80. Absent an extension of time granted in writing by EPA, EPA may determine that late submissions fail to meet the requirements of this AOC.

81. Upon EPA approval, submissions by Respondent are incorporated and enforceable as part of this AOC; in case of inconsistency between any submission by Respondent and this document and its subsequent modifications, this document and its subsequent modifications will control.

82. The information required to be submitted pursuant to this AOC is not subject to the approval requirements of the Paperwork Reduction Act of 1995, 44 U.S.C. § 3501 *et seq.* because it seeks the collection of information by an agency from specific individuals or entities as part of an administrative action or investigation.

83. EPA may use any information submitted in accordance with this AOC in support of an administrative, civil, or criminal action.

V. General Provisions

84. The parties consent to transmission of this AOC by e-mail at the following e-mail addresses: dooley.carlene@epa.gov and steven.murawski@adm.com.

85. Violation of this AOC shall be deemed a violation of the SDWA for purposes of Section 1423(b) of the SDWA, 42 U.S.C. § 300h-2(b).

86. The purpose of this AOC includes ensuring ADM conducts a full assessment of the migration of brine and injected carbon dioxide from the Mount Simon formation to the Ironton-Galesville formation and undertakes appropriate remedial actions to address this migration. This AOC also ensures ADM will proceed with any necessary permit applications, notifications, or modification requests. EPA continues to evaluate information submitted by ADM and monitor compliance with Permit No. IL-115-6A-0001.

87. This AOC does not affect the rights of EPA or the United States to pursue appropriate injunctive or other equitable relief or criminal sanctions for any violation of law.

88. EPA reserves all rights and remedies, legal and equitable, available to address any violation cited in this Order and any other violation of the SDWA or of this Order. Neither issuance of this Order by EPA nor compliance with its terms precludes further enforcement action pursuant to Section 1423 of the SDWA, 42 U.S.C. § 300h-2, for the violations cited in this Order, or for any other violations of the SDWA or of this Order committed by Respondent.

89. The parties to this Order understand the SDWA includes provisions for administrative penalties, civil injunctive relief and penalties, and criminal penalties for violations of the SDWA. Specifically, EPA may:

- (a) Assess civil administrative penalties under 42 U.S.C. § 300h-2(c)(1) and 40 C.F.R. Part 19 of up to \$28,619 per day of violation for violations of the SDWA for which penalties are assessed on or after January 8, 2025, for up to a total of \$357,729, or other amounts as penalty levels may later be adjusted at 40 C.F.R. Part 19;
- (b) Seek civil injunctive relief and penalties for violations of the SDWA or for violations of this Order under 42 U.S.C. § 300h-2(b). In accordance with 40 C.F.R. Part 19, EPA may seek civil judicial penalties of up to \$71,545 per day of violation for violations for which penalties are assessed on or after January 8, 2025, or as penalty levels may be later adjusted at 40 C.F.R. Part 19; and
- (c) Seek criminal penalties, including fines and imprisonment, for willful violations of the SDWA or for willful violations of this Order under 42 U.S.C. § 300h-2(b)(2).

90. This AOC does not affect Respondent's responsibility to comply with the SDWA and other applicable federal, state, or local laws and permits.

91. For purposes of the identification requirement in Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), and 26 C.F.R. § 162-21(b)(2), performance of paragraph 67 is restitution, remediation, or required to come into compliance with the law.

92. Pursuant to 26 U.S.C. § 6050X and 26 C.F.R. § 1.6050X-1, EPA is required to send

to the Internal Revenue Service (“IRS”) annually, a completed IRS Form 1098-F (“Fines, Penalties, and Other Amounts”) with respect to any court order or settlement agreement (including administrative settlements), that require a payor to pay an aggregate amount that EPA reasonably believes will be equal to, or in excess of, \$50,000 for the payor’s violation of any law or the investigation or inquiry into the payor’s potential violation of any law, including amounts paid for “restitution or remediation of property” or to come “into compliance with a law.” EPA is further required to furnish a written statement, which provides the same information provided to the IRS, to each payor (i.e., a copy of the IRS Form 1098-F). Failure to comply with providing IRS Form W-9 or Tax Identification Number (“TIN”), as described below, may subject Respondent to a penalty, per 26 U.S.C. § 6723, 26 U.S.C. § 6724(d)(3), and 26 C.F.R. § 301.6723-1. In order to provide EPA with sufficient information to enable it to fulfil these obligations, EPA herein requires, and Respondent herein agrees, that:

- (a) Respondent shall complete an IRS Form W-9 (“Request for Taxpayer Identification Number and Certification”), which is available at <https://www.irs.gov/pub/irs-pdf/fw9.pdf>;
- (b) Respondent shall therein certify that its completed IRS Form W-9 includes Respondent’s correct TIN or that Respondent has applied and is waiting for issuance of a TIN;
- (c) Respondent shall email its completed Form W-9 to Milton Wise at EPA’s Cincinnati Finance Center at wise.milton@epa.gov, within 30 days after the effective date of this Order, and EPA recommends encrypting IRS Form W-9 correspondence; and
- (d) In the event that Respondent has certified in its completed IRS Form W-9 that it

does not yet have a TIN but has applied for a TIN, Respondent shall provide EPA's Cincinnati Finance Center with Respondent's TIN, via email, within five days of Respondent's receipt of a TIN issued by the IRS.

93. Respondent agrees to the terms of this AOC. For the purposes of this AOC only, Archer-Daniels-Midland Company waives any remedies, claims for relief, and otherwise available rights to judicial or administrative review that it may have with respect to any issue of fact or law set forth in this AOC, including any right to seek judicial review under Section 1448(a), 42 U.S.C. § 300j-7(a), of the SDWA or Chapter 7 of the Administrative Procedure Act, 5 U.S.C. §§ 701-706. Archer-Daniels-Midland Company does not waive any remedies, claims for relief, or otherwise available rights as referenced in this paragraph 93 with respect to any nonparty to this AOC.

94. Respondent waives its rights to notice of EPA's proposal to issue this AOC, to request a hearing, and to appeal this AOC as provided in Section 1423(c) of the SDWA, 42 U.S.C. § 300h-2(c).

95. The terms of this AOC bind Respondent and its successors and assigns. Respondent must give notice of this AOC to any successors in interest prior to transferring ownership and must simultaneously verify to the EPA, at the email addresses provided above, that it has given the notice.

96. Each person signing this AOC certifies that he or she has the authority to sign for the party whom he or she represents and to bind that party to the terms of this AOC.

97. The parties acknowledge and agree that final approval by EPA of this AOC is subject to Section 1423(c)(3) of the SDWA, 42 U.S.C. § 300h-2(c)(3).

98. Unless an appeal for judicial review is filed in accordance with Section 1423(c)(6) of the SDWA, 42 U.S.C. § 300h-2(c)(6), this AOC shall become effective 30 days after the date of issuance, which is the date of signature by EPA's representative.

99. EPA may terminate this AOC at any time by written notice to Respondent.

100. Absent the notice described in paragraph 99, Respondent may request in writing that EPA terminate this AOC. With this request for termination, Respondent must submit to the EPA enforcement officer identified in paragraph 69 a written final report and certification of completion describing all actions taken to comply with all requirements of this AOC and the approximate cost to do so. Respondent must include the certification language required under paragraph 71. In response to the request for termination and written final report, EPA may require additional information, actions, or evidence from Respondent to show compliance with this AOC; EPA may pursue appropriate administrative or judicial action to require compliance with this AOC; or EPA may accept the request for termination. Absent the notice described in paragraph 99, this AOC shall terminate on the date that EPA notifies Respondent in writing that EPA agrees with Respondent's request for termination.

Administrative Order on Consent

In the Matter of: Archer-Daniels-Midland Company

Docket Number. SDWA-05-2025-0001

Archer-Daniels-Midland Company

August 6, 2025

Date

Dermot O'Grady

Dermot O'Grady

Senior Vice President, Global Operations

Archer-Daniels-Midland Company

**Administrative Order on Consent
In the Matter of: Archer-Daniels-Midland Company
Docket Number. SDWA-05-2025-0001**

United States Environmental Protection Agency

Date

Carolyn Persoon
Acting Division Director
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 5