

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

In the Matter Of: ) Docket No. SDWA-05-2026-0001  
)  
Sun Chemical Corporation, ) Proceeding under Section 1423(c) of the Safe  
) Drinking Water Act,  
and ) 42 U.S.C. § 300h-2(c)  
)  
Cathay Deep Well Disposal, LLC )  
)  
Valparaiso, Indiana )  
)  
Respondents. )  
\_\_\_\_\_ )

**Consent Agreement and Final Order**

**Preliminary Statement**

1. This is an administrative action commenced and concluded under Section 1423(c)(1) of the Safe Drinking Water Act (SDWA), 42 U.S.C. § 300h-2(c)(1), and Sections 22.1(a)(9), 22.13(b), 22.18(b)(2) and (3), and 22.45 of the *Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits* (Consolidated Rules), as codified at 40 C.F.R. Part 22.
2. Complainant is the Director of the Enforcement and Compliance Assurance Division, U.S. Environmental Protection Agency (EPA), Region 5.
3. Respondents are Sun Chemical Corporation and Cathay Deep Well Disposal, LLC, a corporation and a limited liability company, respectively, doing business in Indiana.

4. Where the parties agree to settle one or more causes of action before the filing of a complaint, an administrative action may be commenced and concluded simultaneously by the issuance of a consent agreement and final order (CAFO). 40 C.F.R. § 22.13(b).

5. The parties agree that settling this action without the filing of a complaint or the adjudication of any issue of fact or law is in their interest and in the public interest.

6. Respondents consent to the assessment of the civil penalty specified in this CAFO and to the terms of this CAFO.

#### **Jurisdiction and Waiver of Right to Hearing**

7. Respondents admit the jurisdictional allegations in this CAFO and neither admit nor deny the factual allegations in this CAFO.

8. Respondents waive their rights to notice of EPA's proposal to issue this CAFO, to request a hearing as provided at 40 C.F.R. § 22.15(c) and Section 1423(c)(3) of the SDWA, 42 U.S.C. § 300h-2(c)(3), any right to contest the allegations in this CAFO, and their right to appeal this CAFO.

9. Respondents waive any rights or defenses that Respondents have or may have for this matter to be resolved in federal court, including but not limited to any right to a jury trial, and waives any right to challenge the lawfulness of the final order accompanying the consent agreement.

#### **Statutory and Regulatory Background**

10. Section 1421 of 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 underground injection which endangers drinking water sources.

11. 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.

12. 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.

13. 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”).

14. Section 1422(c) of the SDWA, 42 U.S.C. § 300h-1(c), provides that the Administrator for 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.

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

16. The SDWA requires EPA, and if applicable, the approved state primacy program,

to prohibit all underground injections unless authorized by a permit or a rule. 42 U.S.C. § 300h-1(c); § 300h(b)(1)(A). The UIC regulations contain such a prohibition. 40 C.F.R. § 144.11.

17. EPA administers and has primary enforcement responsibility of the UIC Class I program in the State of Indiana. The UIC program for the State of Indiana is set forth at 40 C.F.R. Part 147, Subpart P and consists of the UIC program requirements of 40 C.F.R. Parts 124, 144, 146, and 148 and the additional requirements set forth in the remainder of Subpart P. 40 C.F.R. § 147.751(a).

18. 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 injection wells must be authorized either by permit or rule. Pursuant to 40 C.F.R. § 144.6(a), Class I wells are (1) those used by generators of hazardous waste or owners or operators of hazardous waste management facilities to inject hazardous waste beneath the lowermost formation containing, within one-quarter mile of the well bore, an underground source of drinking water, (2) other industrial and municipal disposal wells which inject fluids beneath the lowermost formation containing, within one quarter mile of the well bore, an underground source of drinking water, and (3) radioactive waste disposal wells which inject fluids below the lowermost formation containing an underground source of drinking water within one quarter mile of the well bore.

19. In addition to being subject to the “General Program Requirements” set forth in 40 C.F.R. Part 144, Subpart B (40 C.F.R. §§ 144.11-144.19), any UIC permittee must, in accordance with 40 C.F.R. § 144.51(a), comply with all conditions of its permit. 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.

20. Sections 1423(a) and (c) of the SDWA, 42 U.S.C. § 300h-2(a), (c), authorize EPA to assess a civil penalty to any person found to be in violation of any requirement of an applicable UIC program and/or order compliance with such requirement or regulation pursuant to Section 1423(c) of the SDWA, 42 U.S.C. § 300h-2(c).

21. Under Section 1423(c)(1) of the SDWA, 42 U.S.C. § 300h-2(c)(1) and 40 C.F.R. Part 19, EPA may assess a civil penalty of not more than \$28,619 for each day of violation, up to a maximum administrative penalty of \$357,729 for SDWA violations occurring after November 2, 2015 and/or issue an order requiring compliance.

#### **Factual Allegations and Alleged Violations**

22. Respondent Sun Chemical Corporation and Respondent Cathay Deep Well Disposal, LLC are, respectively, a corporation and limited liability company, and as such, Respondents are each 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.

23. On January 30, 2013, EPA issued UIC Permits IN-127-11-C007 and IN-127-11-C008 (together, the Permits) to Respondents to operate, respectively, an underground injection well commonly known as Waste Disposal Well No. 1 (WDW No. 1) and an underground injection well commonly known as Waste Disposal Well No. 2 (WDW No. 2) (together, the Wells). The Wells are located at 4901 Evans Avenue, Valparaiso, Porter County, Indiana, 46383 (Facility), and are owned and operated by Respondents. The Permits have an effective date of January 30, 2013 and an expiration date of January 30, 2023.

24. As described in Part I.E.3 of the Permits, if the permittee wishes to continue an activity regulated by the Permits after the expiration date of the Permits, the permittee must submit a complete application for a new permit at least 180 calendar days before the Permits expire. On July 21, 2022, Respondents submitted an application to EPA for renewal of the Permits. On January 19, 2023, EPA acknowledged that the renewal application was administratively complete.

25. The Permits authorize the underground injection of non-hazardous wastewater and wastes excluded from management under the Resource Conservation and Recovery Act, as specified at 40 C.F.R. § 261.4, process waste generated by Respondents' Facility, wastewater from outside Respondents' Facility, stormwater from an onsite retention pond, and water from the wet process stacks scrubbers into the Wells, subject to the terms and conditions set forth in the Permits.

26. The Wells authorized by the Permits are each an "injection well," as defined by 40 C.F.R. § 144.3.

27. Each wastewater/waste described in Paragraph 25 is a "fluid," as defined by 40 C.F.R. § 144.3, because it is a material or substance that flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or state.

28. The subsurface emplacement of the wastewater/waste described in Paragraph 25 through the Wells is a "well injection," as defined by 40 C.F.R. § 144.3.

29. Respondents' Facility 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.

30. The well injections authorized by the Permits occurred at Respondents' injection wells at the Facility.

31. At all times relevant to this CAFO, Respondents owned and operated injection wells in the State of Indiana and were thus subject to the UIC program requirements set forth at 40 C.F.R. Parts 124, 144, 146, 147 (Subpart P), and 148.

32. Respondents did not have an emergency permit pursuant to 40 C.F.R. § 144.34 at any time relevant to this CAFO.

33. On February 21, 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 Parts I.E.7 and 8 of the Permits, EPA inspected Respondents' Facility located at 4901 Evans Avenue, Valparaiso, Indiana 46383 (February 2024 Inspection).

34. On April 2, 2024, EPA sent the inspection report for the February 2024 Inspection to Respondents. On May 2, 2024, Respondents submitted a response to the inspection report.

35. On September 3, 2024, EPA issued a Notice of Violation (NOV) to Respondents alleging certain potential violations of the SDWA regulations and the SDWA.

36. On October 3, 2024, Respondents submitted to EPA a response to the alleged violations described in the NOV and requested a conference pursuant to EPA's offer to confer (October NOV Response).

37. On October 21, 2024, EPA and Respondents conducted a virtual conference and discussed the alleged violations described in the NOV.

38. On November 8, 2024, Respondents submitted a supplemental response to the alleged violations described in the NOV (November NOV Response).

39. Under 40 C.F.R. § 144.51(a) and Part I.E.1 of the Permits, Respondents are required to comply with all conditions of the Permits, and any noncompliance constitutes a violation of the SDWA.

**Count 1: Failure to Install Automatic Shut-off Devices for Annulus Pressure**

**at WDW No. 1 and WDW No. 2**

40. In accordance with Part II.B.5.(b) of the Permits, Respondents must continuously operate and maintain an automatic warning and shut-off system to stop injection within 15 minutes of any injection pressure, annulus pressure, or annulus/tubing differential pressure reaching the pressure limits specified in the Permits.

41. During the February 2024 Inspection, EPA observed that Respondents had not installed an automatic warning and shut-off system for annulus pressure monitoring at WDW No. 1 or WDW No. 2.

42. On March 28, 2024, Respondents provided documentation that they installed an automatic warning and shut-off system for the annulus pressure at each of the Wells on March 27, 2024.

43. From January 1, 2020 to March 27, 2024, Respondents failed to continuously operate and maintain an automatic warning and shut-off system for the annulus pressure at the Wells, in violation of Part II.B.5.(b) of the Permits, the UIC Regulations at 40 C.F.R. § 144.51(a), and Section 1421 of the SDWA, 42 U.S.C. § 300h.

**Count 2: Failure to Complete Required Monitoring and Reporting for Waste Sources**

44. In accordance with Part II.C.3 of the Permits, Respondents must comply with the written Waste Analysis Plan, which describes the procedures used to monitor the nature of

injected fluids and the procedures that will be carried out to comply with Part I.E.10 of the Permits.

45. Part III, Attachment F of the Permits states that the Waste Analysis Plan will be entered into the record and thus become an integral part of the Permits.

46. Section 2.B of Respondents' Waste Analysis Plan states that quarterly fingerprint analysis of waste accepted on an ongoing basis will include, at a minimum, for each individual off-site waste that is accepted during a calendar quarter, the following parameters: conductivity, pH, total dissolved solids, total suspended solids, specific gravity, and additional waste-specific parameters, as necessary.

47. In accordance with Part III, Attachment A, Subpart F of the Permits, all wastes that require fingerprint analysis as specified in Part III, Attachment G of the Permits shall, at a minimum, be tested for the following parameters: pH, flashpoint, total suspended solids, conductivity, specific gravity, and any other analyses deemed appropriate for characterizing the injected waste.

48. In accordance with Part III, Attachment G of the Permits, Respondents must conduct fingerprint analyses for approved sources of waste for disposal for the parameters specified in Paragraphs 46 and 47 on a quarterly frequency.

49. In accordance with Part II.D.2 of the Permits, Respondents must report results at least every quarter of injection fluid analyses specified in Part III, Attachments A and G of the Permits.

50. Quarterly Reports submitted by Respondents to EPA for January 2020 through March 2022 did not contain results of fingerprint analyses of waste accepted from approved waste sources, for certain required parameters, as referenced below:

<b>Approved Waste "Source" Number</b>	<b>Quarterly Report Date</b>	<b>Missing Parameter</b>
9	Quarter 1 2020	Conductivity
9	Quarter 2 2020	Conductivity
9	Quarter 3 2020	Conductivity
9	Quarter 4 2020	Conductivity
9	Quarter 1 2021	Conductivity
9	Quarter 2 2021	Conductivity
9	Quarter 3 2021	Conductivity
9	Quarter 4 2021	Conductivity
9	Quarter 1 2022	Conductivity, Flashpoint
18	Quarter 2 2021	Flashpoint
18	Quarter 4 2021	Flashpoint
18	Quarter 1 2022	Flashpoint
45	Quarter 1 2020	Flashpoint
45	Quarter 2 2020	Flashpoint
45	Quarter 3 2020	Flashpoint
45	Quarter 4 2020	Flashpoint
45	Quarter 1 2021	Flashpoint
45	Quarter 2 2021	Flashpoint
45	Quarter 3 2021	Flashpoint
45	Quarter 4 2021	Flashpoint
52	Quarter 4 2021	Flashpoint
52	Quarter 1 2022	Flashpoint
58	Quarter 1 2020	Flashpoint
58	Quarter 2 2020	Flashpoint
58	Quarter 3 2020	Flashpoint
58	Quarter 4 2020	Flashpoint
58	Quarter 1 2021	Flashpoint
58	Quarter 2 2021	Flashpoint
58	Quarter 3 2021	Flashpoint

51. Respondents attributed two of the missing fingerprint analyses data to a failure by the laboratory to conduct analysis for all parameters for which analysis was requested. In

the November NOV Response, Respondents provided information on measures they have taken to help ensure that fingerprint analysis is conducted for all required parameters. Specifically, Respondents stated that they now compare the chain of custodies accompanying sampling requests to the chain of custodies accompanying each laboratory report to confirm testing was completed for all requested parameters.

52. From January 2020 through March 2022, Respondents failed to conduct and report the results of fingerprint analyses of waste from approved “sources” for certain parameters required by Section 2.B of the Waste Analysis Plan and/or Part III, Attachment A, Subpart F of the Permits, as depicted in the table set forth in Paragraph 50. Respondents’ failure to conduct required fingerprint analysis is in violation of Part II.C.3, Part III, Attachment A, Subpart F, Part III, Attachment F, and Part III, Attachment G of the Permits, the UIC Regulations at 40 C.F.R. § 144.51(a), and Section 1421 of the SDWA, 42 U.S.C. § 300h. Respondents’ failure to report the results of required fingerprint analyses is in violation of Part II.D.2. of the Permits, the UIC Regulations at 40 C.F.R. § 144.51(a), and Section 1421 of the SDWA, 42 U.S.C. § 300h.

**Count 3: Failure to Accurately Report Off-Site Waste Volumes**

53. In accordance with Part II.C.3 of the Permits, Respondents must comply with the written Waste Analysis Plan, which describes the procedures used to monitor the nature of injected fluids and the procedures that will be carried out to comply with Part I.E.10 of the Permits.

54. Part III, Attachment F of the Permits states that the Waste Analysis Plan will be entered into the record and thus become an integral part of the Permits.

55. Section 2.A of Respondents' Waste Analysis Plan states that an offsite waste log book will be maintained and will include entries with operator name, date, generator identification, approximate volume, and approved waste source identification number from the effective permit. Additionally, records of daily volume accepted from offsite sources will be kept in the log book and a total monthly volume of offsite waste will be calculated based on records maintained in the offsite waste log book and noted in the monthly well reports submitted to EPA.

56. Part III, Attachment G of the Permits identifies the following ShoreMet LLC locations on the approved offsite source list:

- a. ShoreMet LLC, located at 3478 West Marble Hill Road, Nabb, Indiana, designated on the source list as Source 52; and
- b. ShoreMet LLC, located at 3601 Enterprise Avenue, Valparaiso, Indiana, designated on the source list as Source 25.

57. Monthly Operating Reports submitted by Respondents to EPA for June 2021 through February 2022 indicated offsite waste was accepted from Source 52. These Monthly Operating Reports did not indicate offsite waste was accepted from Source 25.

58. According to Non-Hazardous Waste Manifest forms for June 2021 through February 2022, Respondents did not accept offsite waste from Source 52; rather, Respondents accepted offsite waste from Source 25.

59. In the November NOV Response, Respondents stated that the discrepancy has not occurred since February 2022 and was the result of human error. Additionally, Respondents stated that to prevent recurrence, the Source Identification Number, generator name, and

address in each waste manifest are now verified for conformance to the information in the Permits.

60. In Monthly Operating Reports for June 2021 through February 2022, Respondents failed to accurately report to EPA all sources of offsite waste accepted, as required by Section 2.A of the Waste Analysis Plan, in violation of Part II.C.3 and Part III, Attachment F of the Permits, the UIC Regulations at 40 C.F.R. § 144.51(a), and Section 1421 of the SDWA, 42 U.S.C. § 300h.

**Count 4: Unauthorized Acceptance of Hazardous Waste for Injection into the Wells**

61. Part I.A of the Permits prohibits any underground injection activity not specifically authorized in the Permits.

62. Part III, Attachment F of the Permits defines the scope of Respondents' injection authorization. Part III, Attachment F of the Permits authorizes Respondents to inject into the Wells non-hazardous waste generated on-site or by off-site sources that are approved by EPA and listed in Attachment G of the Permits. Part III, Attachment F of the Permits does not authorize Respondents to inject hazardous waste generated on-site or by off-site sources.

63. Part III, Attachment G of the Permits lists the off-site sources of non-hazardous waste approved for injection.

64. Part III, Attachment A of the Permits requires waste from approved off-site sources of non-hazardous waste to be periodically sampled at either the point of generation or from a transport truck prior to unloading on-site to confirm that the waste is non-hazardous at the time of acceptance for injection. Part III, Attachment G specifies waste analysis parameters and waste sampling frequencies for approved sources.

65. Pursuant to 40 C.F.R. § 261.3, a solid waste, as defined under 40 C.F.R. § 261.2, that exhibits the characteristic of toxicity, as described in 40 C.F.R. § 261.24, is a hazardous waste.

66. As described in 40 C.F.R. § 261.24, a solid waste exhibits the characteristic of toxicity if, using the Toxicity Characteristic Leaching Procedure (TCLP), the extract from a representative sample of the waste contains any of the provided contaminants at the concentration equal to or greater than the referenced regulatory level; the regulatory concentration level for the characteristic of toxicity for benzene is 0.5 mg/L. Therefore, solid waste determined, via TCLP analysis, to contain benzene at a concentration equal to or greater than 0.5 mg/L exhibits the characteristic of toxicity and is a hazardous waste for purposes of RCRA.

67. In 2021, Respondents accepted shipments of solid waste from an off-site source, Covanta, for disposal. Specifically, according to Monthly Operating Reports submitted to EPA, Respondents accepted five separate waste shipments for disposal from Covanta in July and September 2021.

68. On October 28, 2021, Respondents provided, to a third-party laboratory, a composite sample of the Covanta waste accepted during July and September 2021, for TCLP analysis. The laboratory report, dated November 10, 2021, shows that the composite sample contained a benzene concentration of 23 mg/L.

69. The Covanta solid waste accepted by Respondents during July and September 2021 exhibited the characteristic of toxicity and was a hazardous waste at the time of acceptance.

70. In the October NOV Response, Respondents stated that:
- a. the off-site source certified, based on its operator's knowledge, that each of the five shipments of waste referenced in Paragraph 67 was non-hazardous;
  - b. the benzene TCLP analysis and results referenced in Paragraph 68 resulted from Respondents' voluntarily sampling waste from the source referenced in Paragraph 67 more frequently than required by the Permits;
  - c. prior to injection of the five shipments of waste referenced in Paragraph 67, Respondents co-mingled these wastes with wastes from other sources, and TCLP analysis of a sample of the co-mingled waste yielded a benzene concentration below 0.5 mg/L; and
  - d. upon receipt of the benzene TCLP results referenced in Paragraph 68, Respondents stopped accepting further shipments from the source referenced in Paragraph 67 and promptly provided their findings to EPA in the October 2021 Monthly Operating Report.

71. Respondents accepted waste, for injection, from Covanta in July and September 2021 that Respondents believed was non-hazardous at the time of acceptance and injection, but was shown through subsequent testing to be characteristically hazardous at the time of acceptance, in violation of Part I.A. and Part III, Attachment F of the Permits, the UIC Regulations at 40 C.F.R. § 144.51(a), and Section 1421 of the SDWA, 42 U.S.C. § 300h. As referenced above, at the time of injection, the waste had been co-mingled with waste from

other sources. The co-mingled waste was shown, through analysis, to not be characteristically hazardous, as described in 40 C.F.R. Part 261, Subpart C, at the time of injection.

**Count 5: Failure to Report all Accepted Waste Sources for Disposal**

72. In accordance with Part II.C.3 of the Permits, Respondents must comply with the written Waste Analysis Plan, which describes the procedures used to monitor the nature of injected fluids and the procedures that will be carried out to comply with Part I.E.10 of the Permits.

73. Part III, Attachment F of the Permits states that the Waste Analysis Plan will be entered into the record and thus become an integral part of the Permits.

74. Section 2.A of the Waste Analysis Plan states that an offsite waste log book will be maintained and will include entries with operator name, date, generator identification, approximate volume, and approved waste source identification number from the effective permit. Additionally, records of daily volume accepted from offsite sources will be kept in the log book and a total monthly volume of offsite waste will be calculated based on records maintained in the offsite log book and noted in the monthly well reports submitted to EPA.

75. According to a Uniform Hazardous Waste Manifest form dated October 13, 2021, Respondents accepted waste from Covanta for disposal.

76. In the October 2021 Monthly Operating Report submitted by Respondents to EPA, Covanta is not listed as a source from which waste was accepted for disposal in October 2021.

77. In the November NOV Response, Respondents stated this was a one-time oversight and to help prevent recurrence, Respondents now manually verify reported monthly volumes with manifest records and invoices.

78. In October 2021, Respondents accepted waste from Covanta for disposal but failed to include this source in the Monthly Operating Report, as required by Section 2.A of the Waste Analysis Plan, in violation of Part II.C.3 and Part III, Attachment F of the Permits, the UIC Regulations at 40 C.F.R. § 144.51(a), and Section 1421 of the SDWA, 42 U.S.C. § 300h.

**Count 6: Failure to Perform Waste Analysis Sampling for an Approved Source**

79. In accordance with Part III, Attachment G of the Permits, presently approved “sources” of waste for disposal must be sampled for specified parameters at a predetermined frequency.

80. Pursuant to Part III, Attachment G of the Permits, Source 58, which corresponds to Buckeye Terminals, located at 226 E. Hosler Road, Huntington, Indiana, must be sampled at least annually for the toxicity characteristic list described in 40 C.F.R. § 261.24.

81. According to Monthly Operating Reports submitted to EPA by Respondents for 2022, Respondents accepted waste from Source 58 only in March 2022.

82. Respondents’ March 2022 Monthly Operating Report submitted to EPA documented the acceptance of waste from Source 58, but did not contain results of the required toxicity characteristic sampling, which was noted as an area of concern in the February 2024 EPA Inspection Report.

83. In response to the February 2024 EPA Inspection Report, Respondents confirmed that, in 2022, waste from Source 58 was only accepted for disposal during March 2022 and the

toxicity characteristic sampling was not performed. Respondents also indicated that following this incident, they modified their procedures and now conduct the annual toxicity characteristics test for each source with the first shipment of waste in each calendar year.

84. In 2022, Respondents accepted waste from an approved “source” but failed to perform the required sampling for the toxicity characteristic list described in 40 C.F.R. § 261.24, in violation of Part III, Attachment G of the Permits, the UIC Regulations at 40 C.F.R. § 144.51(a), and Section 1421 of the SDWA, 42 U.S.C. § 300h.

**Count 7: Failure to Maintain Minimum Annulus Pressure and the Minimum Annulus and Injection Pressure Differential at WDW No. 1**

85. In accordance with Part II.B.3 of UIC Permit IN-127-1I-C007 for WDW No. 1 (referenced in Paragraph 23), Respondents must maintain a positive pressure on the annulus as specified in Part III, Attachment A of Permit IN-127-1I-C007.

86. In accordance with Part II.B.4 of Permit IN-127-1I-C007, Respondents must maintain, over the entire length of the tubing, a pressure differential between the tubing and annulus as specified in Part III, Attachment A of Permit IN-127-1I-C007.

87. Part III, Attachment A of Permit IN-127-1I-C007 specifies that annulus pressure shall be a minimum of 100 pounds per square inch gauge (psig).

88. Part III, Attachment A of Permit IN-127-1I-C007 specifies that the Annulus/Injection Differential shall be 100 psig above operating injection pressure.

89. According to the Monthly Operating Report submitted by Respondents to EPA for June 2022, on June 18, 2022, the minimum annulus pressure at WDW No. 1 was reported as 81.2 psig.

90. According to the Monthly Operating Report submitted by Respondents to EPA for June 2022, on June 18, 2022, the minimum annulus and injection pressure differential at WDW No. 1 was reported as 90.3 psig above operating injection pressure.

91. According to the Monthly Operating Report submitted by Respondents to EPA for January 2024, on January 16, 2024, the minimum annulus pressure at WDW No. 1 was reported as 0.2 psig.

92. According to the Monthly Operating Report submitted by Respondents to EPA for January 2024, on January 16, 2024, the minimum annulus and injection pressure differential at WDW No. 1 was reported as 2.2 psig above operating injection pressure.

93. In the October NOV Response, Respondents stated that following each aforementioned instance of minimum annulus pressure or minimum annulus and injection pressure differential not being met at WDW No. 1, injection activity at WDW No. 1 ceased and prompt action was taken to address the issue.

94. On June 18, 2022 and January 16, 2024, Respondents failed to maintain an annulus pressure of at least 100 psig at WDW No. 1, in violation of Part II.B.3 and Part III, Attachment A of Permit IN-127-1I-C007, the UIC Regulations at 40 C.F.R. § 144.51(a), and Section 1421 of the SDWA, 42 U.S.C. § 300h.

95. On June 18, 2022 and January 16, 2024, Respondents failed to maintain an annulus and injection pressure differential of at least 100 psig above operating injection pressure at WDW No. 1, in violation of Part II.B.4 and Part III, Attachment A of Permit IN-127-1I-C007, the UIC Regulations at 40 C.F.R. § 144.51(a), and Section 1421 of the SDWA, 42 U.S.C. § 300h.

**Count 8: Failure to Maintain Minimum Annulus Pressure and the Minimum Annulus and Injection Pressure Differential at WDW No. 2**

96. In accordance with Part II.B.3 of UIC Permit IN-127-1I-C008 for WDW No. 2 (referenced in Paragraph 23), Respondents must maintain a positive pressure on the annulus as specified in Part III, Attachment A of that permit.

97. In accordance with Part II.B.4 of Permit IN-127-1I-C008, Respondents must maintain, over the entire length of the tubing, a pressure differential between the tubing and annulus as specified in Part III, Attachment A of Permit IN-127-1I-C008.

98. Part III, Attachment A of Permit IN-127-1I-C008 specifies that annulus pressure shall be a minimum of 100 psig.

99. Part III, Attachment A of Permit IN-127-1I-C008 specifies that the Annulus/Injection Differential shall be 100 psig above operating injection pressure.

100. According to the Monthly Operating Report submitted by Respondents to EPA for January 2022, on January 27, 2022, the minimum annulus pressure at WDW No. 2 was reported as 5.0 psig.

101. According to the Monthly Operating Report submitted by Respondents to EPA for January 2022, on January 27, 2022, the minimum annulus and injection pressure differential at WDW No. 2 was reported as 10.4 psig above operating injection pressure.

102. According to the Monthly Operating Report submitted by Respondents to EPA for June 2022, on June 14, 2022, the minimum annulus pressure at WDW No. 2 was reported as 0.0 psig.

103. According to the Monthly Operating Report submitted by Respondents to EPA for June 2022, on June 14, 2022, the minimum annulus and injection pressure differential at WDW No. 2 was reported as 12.1 psig above operating injection pressure.

104. According to the Monthly Operating Report submitted by Respondents to EPA for July 2022, on July 28, 2022, the minimum annulus pressure at WDW No. 2 was reported as 0.0 psig.

105. According to the Monthly Operating Report submitted by Respondents to EPA for July 2022, on July 28, 2022, the minimum annulus and injection pressure differential at WDW No. 2 was reported as 3.0 psig above operating injection pressure.

106. In the October NOV Response, Respondents stated that following each aforementioned instance of minimum annulus pressure or minimum annulus and injection pressure differential not being met at WDW No. 2, injection activity at the WDW No. 2 ceased and prompt action was taken to address the issue.

107. On January 27, June 14 and July 28, 2022, Respondents failed to maintain an annulus pressure of at least 100 psig at WDW No. 2, in violation of Part II.B.3 and Part III, Attachment A of Permit IN-127-1I-C008, the UIC Regulations at 40 C.F.R. § 144.51(a), and Section 1421 of the SDWA, 42 U.S.C. § 300h.

108. On January 27, June 14, and July 28, 2022, Respondents failed to maintain an annulus and injection pressure differential of at least 100 psig above operating injection pressure at WDW No. 2, in violation of Part II.B.4 and Part III, Attachment A of Permit IN-127-1I-C008, the UIC Regulations at 40 C.F.R. § 144.51(a), and Section 1421 of the SDWA, 42 U.S.C. § 300h.

### **Count 9: Failure to Maintain Continuous Monitoring Devices at the Wells**

109. In accordance with Part II.C.2 of the Permits, Respondents must maintain continuous monitoring devices and use them to monitor injection pressure, flow rate, and the pressure on the annulus between the tubing and the long string of the casing.

110. According to the Monthly Operating Report submitted by Respondents to EPA for January 2023, on January 1, 2023, the Facility experienced issues with the continuous monitoring systems at both Wells. In response, Respondents shut down the Wells and manually recorded hourly well data; no injection occurred at the Wells during this continuous monitoring failure.

111. In January 2023, Respondents failed to maintain and utilize continuous monitoring devices at the Wells, in violation of Part II.C.2 of the Permits, the UIC Regulations at 40 C.F.R. § 144.51(a), and Section 1421 of the SDWA, 42 U.S.C. § 300h.

#### **Civil Penalty**

112. Based upon the facts alleged in this CAFO, the factors listed in Section 1423(c)(4)(B) of the SDWA, 42 U.S.C. 300h-2(c)(4)(B), the appropriate EPA UIC Program Judicial and Administrative Order Settlement Penalty Policy, EPA has determined that an appropriate civil penalty to settle this action is \$58,000.

113. Respondents agree to pay a civil penalty in the amount of \$58,000 (“Assessed Penalty”) within 30 days after the effective date of this CAFO.

114. Respondents must pay the Assessed Penalty and any interest, fees, and other charges due using any method or combination of appropriate methods, as provided on the EPA website: <https://www.epa.gov/financial/makepayment>. For additional instructions see:

<https://www.epa.gov/financial/additional-instructions-making-payments-epa>. However, for any payments made after September 30, 2025, and in accordance with the March 25, 2025 Executive Order on [Modernizing Payments To and From America's Bank Account](#), Respondents shall pay using one of the electronic payments methods listed on [EPA's How to Make a Payment website](#) and will not pay with a paper check.

115. When making a payment, Respondents must:
- a. Identify every payment with Respondents' names and the document number of this CAFO, SDWA-05-2026-0001.
  - b. Concurrently with any payment or within 24 hours of any payment, serve proof of such payment to the following persons:

Regional Hearing Clerk, U.S. EPA  
[r5hearingclerk@epa.gov](mailto:r5hearingclerk@epa.gov)

Leah Zedella, Water Enforcement and Compliance Branch, U.S. EPA  
[zedella.leah@epa.gov](mailto:zedella.leah@epa.gov)

Hala Kuss, Office of Regional Counsel, U.S. EPA  
[kuss.hala@epa.gov](mailto:kuss.hala@epa.gov)

Cincinnati Finance Center, U.S. EPA  
[CINWD\\_AcctsReceivable@epa.gov](mailto:CINWD_AcctsReceivable@epa.gov)

"Proof of Payment" means, as applicable, a copy of the confirmation of credit card or debit card payment, or confirmation of wire or automated clearinghouse transfer, and any other information required to demonstrate that payment has been made according to EPA requirements, in the amount due, and identified with the appropriate docket number and Respondents' names.

116. Interest, Charges, and Penalties on Late Payments. Pursuant to 42 U.S.C. § 300h-2, 31 U.S.C. § 3717, 31 C.F.R. § 901.9, and 40 C.F.R. § 13.11, if Respondents fail to timely pay any portion of the Assessed Penalty per this CAFO, the entire unpaid balance of the Assessed Penalty and all accrued interest shall become immediately due and owing, and EPA is authorized to recover the following amounts.

- a. Interest. Interest begins to accrue from the Effective Date. If the Assessed Penalty is paid in full within thirty (30) days, interest accrued is waived. If the Assessed Penalty is not paid in full within thirty (30) days, interest will continue to accrue until the unpaid portion of the Assessed Penalty as well as any interest, penalties, and other charges are paid in full. Interest will be assessed at prevailing rates, per 42 U.S.C. § 300h-2(c)(7). The rate of interest is the IRS large corporate underpayment rate.
- b. Handling Charges. The United States' enforcement expenses including, but not limited to, attorneys' fees and costs of handling collection proceedings.
- c. Late Payment Penalty. A late payment penalty of six percent (6%) per annum, will be assessed monthly on all debts, including any unpaid portion of the Assessed Penalty, interest, penalties, and other charges, that remain delinquent more than ninety (90) days.

117. Late Penalty Actions. In addition to the amounts described in the prior Paragraph, if Respondents fail to timely pay any portion of the Assessed Penalty per this CAFO,

EPA may take additional actions. Such actions EPA may take include, but are not limited to, the following:

- a. Refer the debt to a credit reporting agency or a collection agency, per 40 C.F.R. §§ 13.13 and 13.14.
- b. Collect the debt by administrative offset (i.e., the withholding of money payable by the United States government to, or held by the United States government for, a person to satisfy the debt the person owes the United States government), which includes, but is not limited to, referral to the Internal Revenue Service for offset against income tax refunds, per 40 C.F.R. Part 13, Subparts C and H.
- c. Suspend or revoke Respondents' licenses or other privileges, or suspend or disqualify Respondents from doing business with EPA or engaging in programs EPA sponsors or funds, per 40 C.F.R. § 13.17.
- d. Request that the Attorney General bring a civil action in the appropriate district court to recover the full remaining balance of the debt, in addition to costs, attorney fees, and interest pursuant to 42 U.S.C. § 300h-2(c)(7). In any such action, the validity, amount, and appropriateness of the Assessed Penalty will not be subject to review.

118. Allocation of Payments. Pursuant to 31 C.F.R. § 901.9(f) and 40 C.F.R. § 13.11(d), a partial payment of debt will be applied first to outstanding handling charges, second to late penalty charges, third to accrued interest, and last to principal that is the outstanding Assessed Penalty amount.

119. Tax Treatment of Penalties. Penalties, interest and other charges paid pursuant to this CAFO are not deductible for purposes of federal taxes.

120. Full payment of the penalty and compliance with this CAFO resolves only Respondents' liability for only federal civil penalties for only the violations under the Underground Injection Control program of the Safe Drinking Water Act alleged in this CAFO.

121. Respondents certify that they are complying with the SDWA, its implementing regulations, and the Permits.

122. This CAFO constitutes a "previous violation" as that term is used in EPA's UIC Penalty Policy and to determine Respondents' "history of such violations" under Section 1423(c)(4)(B) of the SDWA, 42 U.S.C. § 300h-2(c)(4)(B).

123. Each party agrees to bear its own costs and attorneys' fees in this action.

124. Except as provided in Paragraph 120, above, compliance with this CAFO will not be a defense to any actions subsequently commenced pursuant to federal law administered by EPA.

#### **General Provisions**

125. The parties consent to service of this CAFO by e-mail at the following valid e-mail addresses: kuss.hala@epa.gov (for Complainant), and Daron.Ravenborg@bclplaw.com, (for Respondents). Respondents understand that the CAFO will become publicly available upon proposal for public comment and upon filing.

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

127. 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 IRS Form 1098-F). Failure to comply with providing IRS Form W-9 or Tax Identification Number (“TIN”), as described below, may subject Respondents 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 fulfill these obligations, EPA herein requires, and Respondents herein agrees, that:

- a. Each 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. Each 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. Each Respondent shall email its completed Form W-9 to EPA’s Cincinnati Finance Center at [wise.milton@epa.gov](mailto:wise.milton@epa.gov) within 30 days after the effective date of his CAFO, and EPA recommends encrypting IRS Form W-9 email correspondence; and

d. In the event that either Respondent has certified in its completed IRS Form W-9 that it does not yet have a TIN but has applied for a TIN, that Respondent shall provide EPA's Cincinnati Finance Center with Respondent's TIN, via email, within five (5) days of Respondent's receipt of a TIN issued by the IRS.

128. This CAFO 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.

129. This CAFO does not affect Respondents' responsibility to comply with the SDWA and other applicable federal, state, or local laws and permits.

130. The terms of this CAFO bind Respondents and their successors and assigns.

131. Each person signing this CAFO 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 CAFO.

132. This CAFO constitutes the entire agreement between the parties.

133. Pursuant to 40 C.F.R. § 22.18(b)(3), this Consent Agreement does not dispose of this proceeding without execution of the Final Order. The Final Order will not be issued until after completion of the requirements of Section 1423(c)(3) of the SDWA, 42 U.S.C. § 300h-2(c), and 40 C.F.R. § 22.45(b), which require, among other things, public notice and a reasonable opportunity to comment on any proposed penalty order. Further, under 40 C.F.R. § 22.45, this Consent Agreement may be withdrawn before execution of the Final Order.

134. Absent the filing of an appeal for judicial review in accordance with Section 1423(c)(6) of the SDWA, 42 U.S.C. § 300h-2(c)(6), or 40 C.F.R. § 22.45(c)(4)(viii), this CAFO shall become effective 30 days after the date of issuance, which is the date that the Final Order contained in this CAFO is signed by the Regional Judicial Officer or Regional Administrator.

**Consent Agreement and Final Order**

**In the Matter of:** Sun Chemical Corporation and Cathay Deep Well Disposal, LLC

**Docket No.** SDWA-05-2026-0001

**Sun Chemical Corporation, Respondent**

01/15/2026

Date



Name of Signatory

EHS Director, Americas

Title of Signatory

**Cathay Deep Well Disposal, LLC, Respondent**

01/15/2026

Date



Name of Signatory

Site Manager

Title of Signatory

**Consent Agreement and Final Order**

**In the Matter of:** Sun Chemical Corporation and Cathay Deep Well Disposal, LLC

**Docket No.** SDWA-05-2026-0001

**United States Environmental Protection Agency, Complainant**

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

**Consent Agreement and Final Order**

**In the Matter of:** Sun Chemical Corporation and Cathay Deep Well Disposal, LLC

**Docket No.** SDWA-05-2026-0001

**Final Order**

This Consent Agreement and Final Order, as agreed to by the parties, shall become effective 30 days after issuance, 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), or 40 C.F.R. § 22.45(c)(4)(viii). When final and effective, this Final Order concludes this proceeding pursuant to 40 C.F.R. §§ 22.18, 22.31, and 22.45. IT IS SO ORDERED.

By:

\_\_\_\_\_  
Ann Coyle  
Regional Judicial Officer  
Region 5  
U.S. Environmental Protection Agency