

**UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6
Dallas, Texas**

In the Matter of:

The Dow Chemical Company

Respondent

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Docket No. CAA-06-2021-3303

ADMINISTRATIVE ORDER ON CONSENT

Preliminary Statement

1. The U.S. Environmental Protection Agency, Region 6 (EPA), and The Dow Chemical Company (Respondent) have agreed to voluntarily enter into this Administrative Order on Consent (Order) for the purposes of carrying out the goals of Section 112(r) of the Clean Air Act (CAA), 42 U.S.C. § 7412(r), and the regulations promulgated thereunder and codified at 40 C.F.R. Part 68.

Jurisdiction

2. This Order is entered into pursuant to the authority of Section 113(a)(3)(B) of the CAA, 42 U.S.C. § 7413(a)(3)(B). Section 113(a)(3)(B) of the CAA, 42 U.S.C. § 7413(a)(3)(B), provides that whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of, any other requirement or prohibition of Subchapter I of the CAA, which includes, among other things, the requirements of Section 112(r) of the CAA, 42 U.S.C. § 7412(r), and the regulations promulgated thereunder, the Administrator may issue an order requiring compliance with such requirement or prohibition.

Parties

3. Complainant is the Director of the Enforcement and Compliance Assurance Division, EPA, Region 6, as duly delegated by the Administrator of the EPA and the Regional Administrator, EPA, Region 6.

4. Respondent is The Dow Chemical Company, a corporation registered in the State of Delaware, and authorized to conduct business in the State of Louisiana.

Statutory and Regulatory Background

5. On November 15, 1990, the President signed into law the CAA Amendments of 1990. The Amendments added Section 112(r) to Title I of the CAA, 42 U.S.C. § 7412(r). The objective of Section 112(r) is to minimize the consequences of any such release of any substance listed pursuant to Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3), or any other extremely hazardous substance.

6. Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3), mandates the Administrator to promulgate a list of regulated substances which, in the case of an accidental release, are known to cause or may reasonably be anticipated to cause death, injury, or serious adverse effects to human health or the environment. Section 112(r)(5) of the CAA, 42 U.S.C. § 7412(r)(5), mandates that the Administrator establish a threshold quantity for any substance listed pursuant to Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3). The list of regulated substances and respective threshold quantities is codified at 40 C.F.R. § 68.130.

7. Section 112(r)(7) of the CAA, 42 U.S.C. § 7412(r)(7), requires the Administrator to promulgate regulations that address release prevention, detection, and correction requirements for stationary sources with threshold quantities of regulated substances listed pursuant to Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3). On June 20, 1996, EPA promulgated a final rule

known as the Risk Management Program, 40 C.F.R. Part 68, which implements Section 112(r)(7) of the CAA, 42 U.S.C. § 7412(r)(7).

8. The regulations at 40 C.F.R. Part 68 require owners and operators to develop and implement a Risk Management Program at each stationary source with over a threshold quantity of regulated substances. The Risk Management Program must include, among other things, a hazard assessment, a prevention program, and an emergency response program. The Risk Management Program is described in a Risk Management Plan (RMP) that must be submitted to the EPA.

9. Pursuant to Section 112(r)(7) of the CAA, 42 U.S.C. § 7412(r)(7), and 40 C.F.R. § 68.150, an RMP must be submitted for all covered processes by the owner or operator of a stationary source subject to 40 C.F.R. Part 68 no later than the latter of June 21, 1999, or the date on which a regulated substance is first present above the threshold quantity in a process.

10. The regulations at 40 C.F.R. § 68.10 set forth how the chemical accident prevention provisions apply to each program level of covered processes. Pursuant to 40 C.F.R. § 68.10(i), a covered process is subject to Program 3 requirements if the process does not meet the requirements of Program 1, as described in 40 C.F.R. § 68.10(g), and if it is in a specified North American Industrial Classification System code or is subject to the OSHA process safety management standard, 29 C.F.R. 1910.119.

Definitions

11. Section 302(e) of the CAA, 42 U.S.C. § 7602(e), defines “person” to include any individual, corporation, partnership, association, State, municipality, political subdivision of a

State, and any agency department, or instrumentality of the United States and any officer, agent, or employee thereof.

12. Section 112(r)(2)(A) of the CAA, 42 U.S.C. § 7412(r)(2)(A), and the regulation at 40 C.F.R. § 68.3 defines “accidental release” as an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.

13. Section 112(r)(2)(C) of the CAA, 42 U.S.C. § 7412(r)(2)(C) and the regulation at 40 C.F.R. § 68.3 defines “stationary source,” in part, as any buildings, structures, equipment, installations or substance emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control) and from which an accidental release may occur.

14. The regulation at 40 C.F.R. § 68.3 defines “regulated substance” as any substance listed pursuant to Section 112(r)(3) of the CAA, as amended, in 40 C.F.R. § 68.130.

15. The regulation at 40 C.F.R. § 68.3 defines “threshold quantity” as the quantity specified for regulated substances pursuant to Section 112(r)(5) of the CAA, as amended, listed in 40 C.F.R. § 68.130 and determined to be present at a stationary source as specified in 40 C.F.R. § 68.115.

16. The regulation at 40 C.F.R. § 68.3 defines “process” as any activity involving a regulated substance including any use, storage, manufacturing, handling or on-site movement of such substances or combination of these activities. For the purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

17. The regulation at 40 C.F.R. § 68.3 defines “covered process” as a process that has a regulated substance present in more than a threshold quantity as determined under 40 C.F.R. § 68.115.

EPA Findings of Fact and Conclusions of Law

18. Respondent is, and at all times referred to herein was, a “person” as defined by Section 302(e) of the CAA, 42 U.S.C. § 7602(e).

19. Respondent is the owner and operator of the chemical manufacturing facility located at: 21225 Highway 1, Plaquemine, Louisiana 70764 (the Facility).

20. The Facility is a “stationary source” pursuant to Section 112(r)(2)(C) of the CAA, 42 U.S.C. 7412(r)(2)(C), and the regulation at 40 C.F.R. § 68.3.

21. The Respondent has an ethylene oxide Production Unit, Glycol 2, process at the Facility, having more than 10,000 pounds of Ethylene Oxide in the process and meeting the definition of “process” and “covered process” as defined by 40 C.F.R. § 68.3.

22. On November 3, 2019, there was an incident at the Facility that resulted in an accidental release (the Incident).

23. On February 13, 2020, Respondent provided documentation and information concerning the Incident and Respondent’s compliance with Section 112(r) of the CAA, 42 U.S.C. § 7412(r), and 40 C.F.R. Part 68.

24. Ethylene oxide is a “regulated substance” pursuant to 40 C.F.R. § 68.3. The threshold quantity for ethylene oxide, as listed in 40 C.F.R. § 68.130 is 10,000 pounds.

25. Respondent has greater than a threshold quantity of ethylene oxide, in a process at the Facility.

26. From the time Respondent first had on-site greater than a threshold quantity of ethylene oxide in a process, Respondent was subject to the requirements of Section 112(r)(7) of the CAA, 42 U.S.C. § 7412(r)(7), and 40 C.F.R. Part 68 because it was the owner or operator of a stationary source that had more than a threshold quantity of a regulated substance in a process.

27. From the time Respondent first had on-site greater than a threshold quantity of ethylene oxide in a process, Respondent was required to submit an RMP pursuant to 40 C.F.R. § 68.12(a) and comply with the Program 3 prevention requirements because, pursuant to 40 C.F.R. § 68.10(i), the covered process at the Facility did not meet the eligibility requirements of Program 1 and is subject to the OSHA process safety management standard, 29 C.F.R. § 1910.119.

EPA Findings of Violation

28. The facts stated in the EPA Findings of Fact and Conclusions of Law above are herein incorporated.

Operating Procedures

29. The regulation at 40 C.F.R. § 68.12(d)(3) requires the owner or operator of a stationary source with a process subject to Program 3 to implement the prevention requirements of 40 C.F.R. §§ 68.65 through 68.87. Pursuant to 40 C.F.R. § 68.71(a), each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, shall be trained in an overview of the process and in operating procedures as specified in 40 C.F.R. § 68.69. The training shall include emphasis on the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks.

30. On November 3, 2019, Respondent failed to implement safe operating procedures during startup of the Glycol 2 Production Unit, which led to the accidental release of 28.8 pounds of ethylene oxide and burst vessel D-410.

31. Respondent's failure to implement a safe operating procedure for the startup of the Glycol 2 Production Unit pursuant to 40 C.F.R. § 68.69(a)(1)(vii), as required by 40 C.F.R. § 68.12(d)(3) is a violation of Section 112(r)(7) of the CAA, 42 U.S.C. § 7412(r)(7).

Order for Compliance

32. Based on the EPA Findings of Fact and Conclusions of Law and the EPA Findings of Violation set forth above, and pursuant to the authority of Section 113(a)(3)(B) of the CAA, 42 U.S.C. § 7413(a)(3)(B), as amended, Respondent is hereby ORDERED and agrees to comply with the requirements of Section 112(r) of the CAA, 42 U.S.C. § 7412(r), and the regulations promulgated thereunder and codified at 40 C.F.R. Part 68.

33. The EPA and Respondent agree that Respondent shall, as expeditiously as possible, but in no event later than ninety (90) days from the effective date of this Order, complete the following actions (Compliance Actions):

- a. Provide documentation that the plant has replaced the D-410/T-410 acid gas scrubber system with a different vent disposal technology for destruction of the vents.
- b. Revise and/or update underlying policies for the use of MOD 5 Abort Keys to include keeping hardware abort key in a locked cabinet with access only by limited Glycol 2 personnel, and a required hazard assessment and critical procedure to be generated with proper review to bypass safety systems (which would include emergency block valve EBV#4502).

- c. Conduct a Management of Change (MOC) for changes to underlying policies for the use of MOD 5 Abort Keys and train appropriate personnel of the changes as per the Plant's MOC process.

Submissions

34. Respondent must provide documentation of completion of the compliance actions described above to the EPA within one hundred twenty (120) days of the effective date of this Order. All documentation shall be submitted as set forth in this sub-section.

35. All submissions to EPA required by this Order shall contain the following certification signed by an authorized representative of Respondent:

I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

36. All submissions to EPA required by this Order shall be sent by electronic mail to:

Carlos Flores
Enforcement and Compliance Assurance Division
Air Enforcement Branch
U.S. Environmental Protection Agency, Region 6
1201 Elm Street, Suite 500 (ECDAC)
Dallas, Texas 75270-2101
flores.carlos@epa.gov

37. All documents submitted by Respondent to EPA in the course of implementing this Order shall be available to the public unless identified and determined to be confidential business information pursuant 40 C.F.R. Part 2, Subpart B.

Stipulated Penalties

38. Respondent shall be liable for stipulated penalties for failure to comply with the

requirements of this Order. The following stipulated penalties shall accrue per violation per day for failure to comply with the Compliance Actions or Submissions requirements above:

<u>Penalty per Violation per Day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 30th day
\$5,000	31st day and beyond

39. All penalties shall begin to accrue on the day after the complete performance is due, or on the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity required by this Order.

40. The payment of penalties shall not alter in any way Respondent's obligation to comply with the provisions of this Order.

41. All penalties accruing under this section shall be due and payable to the United States within thirty (30) days of Respondent's receipt from the EPA of a demand for payment of stipulated penalties. Such payments shall identify Respondent by name and docket number and shall be by certified or cashier's check made payable to the "United States Treasury" and sent to:

U.S. Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
PO Box 979077
St. Louis, Missouri 63197-9000

or by alternate payment method described at <http://www.epa.gov/financial/makepayment>.

42. A copy of the check or other information confirming payment shall simultaneously be sent by electronic mail to:

Carlos Flores
Enforcement and Compliance Assurance Division
Air Enforcement Branch
U.S. Environmental Protection Agency, Region 6
1201 Elm Street, Suite 500 (ECDAC)
Dallas, Texas 75270-2101
flores.carlos@epa.gov

43. Respondent understands that failure to timely pay any portion of the stipulated penalty may result in the commencement of a civil action in Federal District Court to recover the full remaining balance, along with penalties and accumulated interest. In such case, interest shall begin to accrue on the stipulated penalty from the date of delinquency until such stipulated penalty and any accrued interest are paid in full. 31 C.F.R. § 901.9(b)(1). Interest will be assessed at a rate of the United States Treasury Tax and loan rates in accordance with 31 U.S.C. § 3717. Additionally, a charge will be assessed to cover the costs of debt collection including processing and handling costs, and a non-payment penalty charge of six percent (6%) per year compounded annually will be assessed on any portion of the debt which remains delinquent more than ninety (90) days after payment is due. 31 U.S.C. § 3717(e)(2).

Other Terms and Conditions

44. By entering into this Order, Respondent: (a) consents to and agrees to not contest the EPA's authority or jurisdiction to issue or enforce this Order; and (b) agrees to undertake all actions required by this Order.

45. Respondent neither admits nor denies the EPA Findings of Fact and Conclusions of Law and the EPA Findings of Violation.

46. Respondent and the EPA agree to bear their respective costs and attorney's fees. Respondent waives its right to seek reimbursement of their costs and attorney's fees under the

Equal Access to Justice Act (5 U.S.C. § 504), as amended by the Small Business Regulatory Enforcement Fairness Act (P.L. 104-121), and any regulations promulgated thereunder.

General Provisions

47. Respondent waives any and all remedies, claims for relief and otherwise available rights to jurisdictional or administrative review that Respondent may have with respect to any issue of fact or law set forth in this Order, including, but not limited to, any right of judicial review under Section 307(b)(1) of the CAA, 42 U.S.C. § 7607(b)(1), or under the Administrative Procedure Act, 5 U.S.C. §§ 701-706.

48. Any violation of this Order may result in an additional enforcement action under Section 113 of the CAA, 42 U.S.C. § 7413. The EPA may use any information submitted under this Order in an administrative, civil judicial, or criminal action. Section 113 of the CAA, 42 U.S.C. § 7413, authorizes the Administrator to:

- a. issue an administrative penalty order under Section 113(d)(1) of the CAA, 42 U.S.C. § 7413(d)(1), assessing a civil penalty not to exceed \$48,192 (or amount as adjusted by the Civil Monetary Penalty Adjustment Rule) per day of violation, pursuant to Section 113(d)(1)(B) of the CAA, 42 U.S.C. § 7413(d)(1)(B);
- b. bring a civil judicial enforcement action for permanent or temporary injunction, or to assess and recover a civil penalty not to exceed \$101,439 (or amount as adjusted by the Civil Monetary Penalty Adjustment Rule) per day of violation, or both, pursuant to Section 113(b)(2) of the CAA, 42 U.S.C. § 7413(b)(2); or
- c. request the Attorney General to commence a criminal action pursuant to Section 113(c) of the CAA, 42 U.S.C. § 7413(c).

49. This Order does not resolve any civil or criminal claims for violations alleged in this Order. In accordance with Section 113(a)(4) of the CAA, 42 U.S.C. § 7413(a)(4), issuance of this Order does not preclude EPA from assessing penalties, obtaining injunctive relief, or taking any other action authorized under the CAA, or other applicable federal laws or regulation. This Order does not affect the obligation of Respondent to comply with all federal, state, and local statutes, regulations, and permits.

50. Nothing herein shall be construed to limit the power of the EPA to undertake any action against Respondent or any person in response to conditions that may present an imminent and substantial endangerment to public health, welfare, or the environment.

51. Nothing in this Order shall limit EPA's right to obtain access to, and/or inspect the Facility, and/or to request additional information from Respondent pursuant to the authority of Section 114 of the CAA, 42 U.S.C. § 7414.

52. By signing this Order, the undersigned representative of Respondent certifies that he or she is authorized to enter into the terms and conditions of this Order, and to execute and legally bind Respondent to this Order.

53. The provisions of this Order shall apply and be binding upon Respondent and its agents, officers, directors, employees, trustees, authorized representatives, successors, and assigns. Respondent shall ensure that any agents, officers, directors, employees, contractors, consultants, firms or other persons or entities acting under or for Respondent with respect to matters included herein comply with the terms of this Order. From the effective date until termination of this Order, Respondent must give written notice and a copy of this Order to any successors in interest prior to any transfer of ownership or control of any portion or interest in the Facility. Simultaneously with such notice, Respondent shall provide written notice of such

transfer, assignment, or delegation to the EPA. In the event of such transfer, assignment, or delegation, Respondent shall not be released from the obligations or liabilities of this Order unless the EPA has provided written approval of the release of said obligations or liabilities.

54. Pursuant to Section 113(a)(4) of the CAA, 42 U.S.C. § 7413(a)(4), this Consent Order shall be effective when fully executed, shall not exceed the earlier of one year or the date of a determination by the EPA that Respondent has achieved compliance with all terms of this Order, and shall be nonrenewable.

55. The EPA and Respondent may subsequently amend this Order, in writing, in accordance with the authority of the CAA. In the event of any amendment to this Order, all requirements for performance of this Order not affected by the amendment shall remain as specified by the original Order.

56. Unless otherwise stated, all time periods stated herein shall be calculated in calendar days from such date.

57. The EPA and Respondent agree to the use of electronic signatures for this matter. The EPA and Respondent further agree to electronic service of this Order by electronic mail to the following:

To EPA:

clay.jeffrey@epa.gov

To Respondent:

cmoreno3@dow.com

RESPONDENT:

THE DOW CHEMICAL COMPANY, INC.

Date: _____

Karen Williams
Louisiana Environmental Leader

COMPLAINANT:

U.S. ENVIRONMENTAL PROTECTION AGENCY

Cheryl T. Seager
Director
Enforcement and
Compliance Assurance Division
U.S. EPA, Region 6

CERTIFICATE OF SERVICE

I certify that on the date noted below I sent a true and correct electronic copy of the
original Administrative Order on Consent to:

Carlos Moreno
Counsel
U.S. Operations, Regulatory & North America Legal Department
Dow Chemical Company
cmoreno3@dow.com

Signed
U.S. Environmental Protection Agency, Region 6