



WHEREAS, through this Stipulation and Order Modifying the Consent Decree (“Stipulation”), the United States and TDCC desire to make modifications to certain obligations of TDCC under the Consent Decree at the Orange Facility (as defined in the Consent Decree) located in Texas. Union Carbide does not own or operate the Orange Facility and the Orange Facility is not located in Louisiana; and neither Union Carbide nor LDEQ objects to this Stipulation;

WHEREAS, Paragraph 121 of the Consent Decree provides in pertinent part that the Consent Decree may be modified only by a subsequent written agreement signed by all the Parties and “[w]here the modification constitutes a material change to this Decree, it will be effective only upon approval by the Court;”

WHEREAS, TDCC has requested to add a third Flare Gas Recovery System (“FGRS”) compressor to the two compressors required under the Consent Decree at the Orange Facility;

WHEREAS, TDCC has requested to add default molecular weights for natural gas and methane and to correct an incorrect paragraph reference in Appendix 1.2, Step 2;

NOW THEREFORE, the United States, LDEQ, TDCC, and Union Carbide have each reviewed this Stipulation and hereby agree that, upon approval of this modification by the Court, the Consent Decree shall be modified as follows:

1. The table in Paragraph 37 of the Consent Decree is revised as indicated by the deletions (strikeout) and additions (italicized) below:

Covered Facility	Covered Flares	FGRS Design Capacity (kscf/hour)	FGRS ID / Design Capacity (kscf/hour)	Number of FGRS Compressors/Type	Compliance Deadline for Installation and Commencing Operation

Orange	Ethylene	<del>120</del> <i>180</i>	<del>To Be</del> <del>Determined</del> <del>(TBD)</del> <i>GB-1801</i> <i>(60)</i> <i>GB-1802</i> <i>(60)</i> <i>GB-1803</i> <i>(60)</i>	<del>2 compressor</del> <del>system/TBD</del> <i>3 compressor</i> <i>system/liquid ring</i>	12/31/2024
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2. Paragraph 38.e.(5) is revised and restated in its entirety as follows: Orange Ethylene FGRS. The Orange Ethylene FGRS must have two Compressors Available for Operation or in operation 95% of the time and one Compressor Available for Operation or in operation at all times. The periods provided for in sub-Paragraphs 38.f and 38.g below may be included in the amount of time that the Compressors are Available for Operation when determining compliance with the requirement to have one Compressor Available for Operation or in operation “at all times.”

3. The paragraphs in the Consent Decree Appendix 1.2 at Step 2, directly above and below Equation 3, are revised as indicated by deletions (strikeout) and additions (italicized) as follows:

**For Vent Gas, Assist Steam, Premix Assist Air gas streams, or purge nitrogen for which the Company complies with Paragraph 20 by using a mass flow monitor to determine volumetric flow rate:**

Equation 3 shall be used to determine the volumetric flow rate of Vent Gas, Assist Air, or Assist Steam by converting mass flow rate to volumetric flow at standard conditions (i.e., a temperature of 20 °C (68 °F) and a pressure of 1 atmosphere). Equation 3 uses the molecular weight of the

gas stream as an input to the equation; therefore, if the Company elects to use a mass flow monitor to determine volumetric flow rate of Vent Gas, the Company must collect compositional analysis data for such Vent Gas in accordance with the method set forth in 24.23a. For assist steam, use a molecular weight of 18 pounds per pound-mole. For assist air, use a molecular weight of 29 pounds per pound-mole. For ~~purge~~ nitrogen, use a molecular weight of 28 pounds per pound-mole. *For natural gas and methane, use the molecular weights of 16.85 and 16.04, respectively.* The converted volumetric flow rates at standard conditions from Equation 3 shall then be used to calculate the average volumetric flow rate of that gas stream for the 15-minute block period.

**For gas streams for which the molecular weight of the gas is known and for which the Company complies with Paragraph 20 by using continuous pressure/temperature monitoring system(s):**

Use appropriate engineering calculations to determine the average volumetric flow rate of that gas stream for the 15-minute block period. For assist steam, use a molecular weight of 18 pounds per pound-mole. For assist air, use a molecular weight of 29 pounds per pound-mole. *For nitrogen, use a molecular weight of 28 pounds per pound-mole.* For Vent gas, molecular weight must be determined by collecting compositional analysis data for such Vent Gas in accordance with the method set forth in 24.23.a. *For natural gas and methane, use the molecular weights of 16.85 and 16.04, respectively.*

4. This Stipulation shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7 and La.

R.S. 30:2050.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Stipulation disclose facts or considerations indicating that the Stipulation is inappropriate, improper, or inadequate. TDCC consents to entry of this Stipulation without further notice and agrees not to withdraw from or oppose entry of this Stipulation and Order Modifying the Consent Decree by the Court or to challenge any provision thereof unless the United States or LDEQ has notified TDCC in writing that it no longer supports entry of the Stipulation. Further, the parties agree and acknowledge that final approval by LDEQ and entry of this Consent Decree is subject to the requirements of La. R.S. 30:2050.7, which provides for public notice of this Stipulation in the newspapers of general circulation and the official journal of the parish in which the Hahnville and Plaquemine Facilities are located, an opportunity for public comment, consideration of any comments, and concurrence by the State of Louisiana Attorney General. Evidence of final approval of this Stipulation by LDEQ shall be LDEQ's execution of a Motion to Enter this Stipulation. LDEQ reserves the right to withdraw or withhold consent and will not join in the filing of a Motion to Enter this Stipulation if the State of Louisiana Attorney General raises objections or if comments regarding this Stipulation disclose facts or considerations which indicate that this Stipulation is inappropriate, improper or inadequate.

5. Each undersigned representative of the Applicable Defendant(s) (as defined in the Consent Decree), LDEQ, and the Acting Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Stipulation and to execute and legally bind the Party he or she represents to this document.


6. This Stipulation may be signed in counterparts, and its validity shall not be challenged on that basis.

Subject to the notice and comment provisions of 28 C.F.R. § 50.7, THE UNDERSIGNED PARTIES enter into this Stipulation Modifying the Consent Decree entered in the matter of the *United States of America, et al. v. The Dow Chemical Company, et al.* (E.D. La.).

**FOR PLAINTIFF THE UNITED STATES OF AMERICA:**

TODD KIM  
Assistant Attorney General  
Environment and Natural Resources Division  
U.S. Department of Justice

Attorney-in-Charge:




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United States Attorney  
Eastern District of Louisiana

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**FOR THE UNITED STATES  
ENVIRONMENTAL PROTECTION  
AGENCY:**

Greene,  
Mary E

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Date: 2023.10.10  
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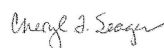
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MARY E. GREENE  
Director, Air Enforcement Division  
Office of Enforcement and Compliance Assurance  
United States Environmental Protection Agency  
Washington, D.C. 20460



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**FOR THE UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY,  
REGION 6:**

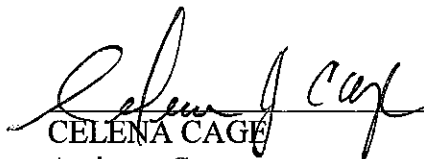


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SEAGER  
Date: 2023.12.21 10:01:12  
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**CHERYL SEAGER**  
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**FOR THE LOUISIANA DEPARTMENT OF  
ENVIRONMENTAL QUALITY:**



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CELENA CAGE  
Assistant Secretary  
Office of Environmental Compliance  
Louisiana Department of Environmental Quality  
P.O. Box 4312  
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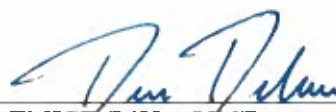


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**FOR THE DEFENDANT THE DOW  
CHEMICAL COMPANY AS SETTLING  
DEFENDANT AND AS LEGAL SUCCESSOR  
TO PERFORMANCE MATERIALS NA, INC.:**




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DENISE DELAUNE  
Vice President of Operations U.S. Gulf Coast &  
Site Director of Texas Operations  
The Dow Chemical Company  
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Lake Jackson, Texas 77566

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**FOR THE DEFENDANT UNION CARBIDE CORPORATION:**

  
\_\_\_\_\_  
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**SO ORDERED.**

Dated and entered this \_\_\_\_\_ day of \_\_\_\_\_, 2023.

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UNITED STATES DISTRICT JUDGE  
Eastern District of Louisiana