

STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:

THE DOW CHEMICAL COMPANY

AI # 1409

PROCEEDINGS UNDER THE LOUISIANA
ENVIRONMENTAL QUALITY ACT
LA. R.S. 30:2001, ET SEQ.

* Settlement Tracking No.
* SA-AE-23-0007
*
* Enforcement Tracking Nos.
* AE-CN-15-00394
* AE-PP-20-00320
*
*
*
*

SETTLEMENT

The following Settlement is hereby agreed to between The Dow Chemical Company (“Respondent”) and the Department of Environmental Quality (“DEQ” or “the Department”), under authority granted by the Louisiana Environmental Quality Act, La. R.S. 30:2001, et seq. (“the Act”).

I

Respondent is a corporation that owns and/or operates a facility located in Plaquemine, Iberville Parish, Louisiana (“the Facility”).

II

On December 21, 2018, the Department issued to Respondent a Consolidated Compliance Order & Notice of Potential Penalty, Enforcement Tracking No. AE-CN-15-00394 (Exhibit 1).

On July 1, 2021, the Department issued to Respondent a Notice of Potential Penalty, Enforcement Tracking No. AE-PP-20-00320 (Exhibit 2).

III

Respondent denies it committed any violations or that it is liable for any fines, forfeitures and/or penalties.

IV

Nonetheless, Respondent, without making any admission of liability under state or federal statute or regulation, agrees to pay, and the Department agrees to accept, a payment in the amount of ONE HUNDRED TWENTY THOUSAND AND NO/100 DOLLARS (\$120,000.00), of which Six Thousand Seven Hundred Twenty-Six and 65/100 Dollars (\$6,726.65) represents the Department's enforcement costs, in settlement of the claims set forth in this agreement. The total amount of money expended by Respondent on cash payments to the Department as described above, shall be considered a civil penalty for tax purposes, as required by La. R.S. 30:2050.7(E)(1).

V

Respondent further agrees that the Department may consider the inspection report(s), permit record(s), the Consolidated Compliance Order & Notice of Potential Penalty, Notice of Potential Penalty and this Settlement for the purpose of determining compliance history in connection with any future enforcement or permitting action by the Department against Respondent, and in any such action Respondent shall be estopped from objecting to the above-referenced documents being considered as proving the violations alleged herein for the sole purpose of determining Respondent's compliance history.

VI

This agreement shall be considered a final order of the Secretary for all purposes, including, but not limited to, enforcement under La. R.S. 30:2025(G)(2), and Respondent hereby waives any right to administrative or judicial review of the terms of this agreement, except such review as may be required for interpretation of this agreement in any action by the Department to enforce this agreement.

VII

This settlement is being made in the interest of settling the state's claims and avoiding for both parties the expense and effort involved in litigation or an adjudicatory hearing. In agreeing to the compromise and settlement, the Department considered the factors for issuing civil penalties set forth in La. R. S. 30:2025(E) of the Act.

VIII

As required by law, the Department has submitted this Settlement Agreement to the Louisiana Attorney General for approval or rejection. The Attorney General's concurrence is appended to this Settlement Agreement.

IX

The Respondent has caused a public notice advertisement to be placed in the official journal of the parish governing authority in Iberville Parish, Louisiana. The advertisement, in form and wording approved by the Department, announced the availability of this settlement for public view and comment and the opportunity for a public hearing. Respondent has submitted an original proof-of-publication affidavit and an original public notice to the Department and, as of the date this Settlement is executed on behalf of the Department, more than forty-five (45) days have elapsed since publication of the notice.

X

Payment is to be made within ten (10) days from notice of the Secretary's signature. If payment is not received within that time, this Agreement is voidable at the option of the Department. Payments are to be made by check, payable to the Department of Environmental Quality, and mailed or delivered to the attention of Accountant Administrator, Financial Services Division, Department of Environmental Quality, Post Office Box 4303, Baton Rouge, Louisiana, 70821-4303. Each

payment shall be accompanied by a completed Settlement Payment Form attached hereto.

XI

In consideration of the above, any claims for penalties are hereby compromised and settled in accordance with the terms of this Settlement.

XII

Each undersigned representative of the parties certifies that he or she is fully authorized to execute this Settlement Agreement on behalf of his or her respective party, and to legally bind such party to its terms and conditions.

THE DOW CHEMICAL COMPANY

BY: Gini Ingram
(Signature)

Gini Ingram
(Printed)

TITLE: EH+S Leader

THUS DONE AND SIGNED in duplicate original before me this 4th day of APRIL, 20 23, at PLAQUEMINE, LA.

Horace P. Crochet Jr
NOTARY PUBLIC (ID # 172448)



HORACE P. CROCHET JR
Notary Public
Notary ID No. 172448
West Baton Rouge Parish, Louisiana

(stamped or printed)

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Roger W. Gingles, Secretary

BY: Celena J. Cage
Celena J. Cage, Assistant Secretary
Office of Environmental Compliance

THUS DONE AND SIGNED in duplicate original before me this 6th day of July, 20 23, at Baton Rouge, Louisiana.

Jay L. Llorioso
NOTARY PUBLIC (ID # 66891)

Jay L. Llorioso
(stamped or printed)

Approved: Celena J. Cage
Celena J. Cage, Assistant Secretary

JOHN BEL EDWARDS
GOVERNOR



CHUCK CARR BROWN, PH.D.
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE

December 21, 2018



CERTIFIED MAIL (7017 2400 0000 7556 7896)
RETURN RECEIPT REQUESTED

THE DOW CHEMICAL COMPANY
c/o C T Corporation System
Agent for Service of Process
3867 Plaza Tower Drive
Baton Rouge, LA 70816

**RE: CONSOLIDATED COMPLIANCE ORDER
& NOTICE OF POTENTIAL PENALTY
ENFORCEMENT TRACKING NO. AE-CN-15-00394
AGENCY INTEREST NO. 1409**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY** is hereby served on **THE DOW CHEMICAL COMPANY (RESPONDENT)** for the violations described therein.

Compliance is expected within the maximum time period established by each part of the **COMPLIANCE ORDER**. The violations cited in the **CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY** could result in the issuance of a civil penalty or other appropriate legal actions.

Any questions concerning this action should be directed to Madison Kirkland at (225) 219-3165 or at Madison.Kirkland@la.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Celena J. Cage".

Celena J. Cage
Administrator
Enforcement Division

CJC/MLK/mlk
Alt ID No. 1280-00008
Attachment

c: The Dow Chemical Company
c/o Mr Joseph Hanna
P.O. Box 150
Plaquemine, LA 70765

**STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE**

IN THE MATTER OF

**THE DOW CHEMICAL COMPANY
IBERVILLE PARISH
ALT ID NO. 1280-00008**

**PROCEEDINGS UNDER THE LOUISIANA
ENVIRONMENTAL QUALITY ACT,
La. R.S. 30:2001, ET SEQ.**

*
*
* **ENFORCEMENT TRACKING NO.**
*
* **AE-CN-15-00394**
*
* **AGENCY INTEREST NO.**
*
* **1409**
*

**CONSOLIDATED
COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY**

The following **CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY** is issued to **THE DOW CHEMICAL COMPANY (RESPONDENT)** by the Louisiana Department of Environmental Quality (the Department), under the authority granted by the Louisiana Environmental Quality Act (the Act), La. R.S. 30:2001, et seq., and particularly by La. R.S. 30:2025(C), 30:2050.2 and 30:2050.3(B).

FINDINGS OF FACT

I.

The Respondent owns and/or operates the Dow Chemical Co-Louisiana Operations (the Facility), a Specialty Chemical facility, located at 21255 Louisiana Highway 1 in Plaquemine, Iberville Parish, Louisiana. The Facility operates or has operated under the authority of the following Title V Air Quality Permits:

PLANT	PERMIT	ISSUE DATE	EXPIRATION DATE
Cellulose	2227-V7	10/14/2011	10/14/2016
	2227-V8	09/27/2016	9/27/2021
	2227-V9	09/01/2017	9/27/2021
Chlorinated Methanes	2037-V2	7/18/2011	7/18/2016
Chlorine and Cell Service	2573-V7	4/23/2013	11/19/2017
Energy Systems	2267-V5	09/14/2011	6/25/2012
	2267-V7	5/29/2015	5/2/2018

PLANT	PERMIT	ISSUE DATE	EXPIRATION DATE
Environmental Operations	2190-V4	1/4/2016	7/26/2016
	2190-V5	04/28/2017	4/28/2022
Glycol I	2007-V5	2/21/2013	5/9/2017
	2007-V7	01/23/2018	1/23/2023
Glycol II	2203-V3	12/22/2010	7/8/2015
	2203-V3AA	6/12/2014	
	2203-V4	9/11/2015	9/11/2020
Light Hydrocarbon II	2255-V6	12/23/2013	12/1/2015
	2255-V7	08/23/2016	08/23/2021
Light Hydrocarbon III	2024-V9	11/30/2015	1/5/2017
	2024-V10	1/23/2018	1/23/2023
	2024-V10AA	5/15/2018	1/23/2023
Plaquemine Cogeneration	3084-V3	5/27/2015	11/6/2018
Polyethylene A	2008-V7	5/8/2013	6/19/2017
	2008-V10	01/29/2018	1/29/2023
	2008-V11	04/05/2018	1/29/2022
Polyethylene B	2179-V11	9/17/2015	2/14/2016
	2179-V12	08/05/2016	8/5/2021
	2179-V13	05/03/2017	8/5/2021
Polyethylene C	2048-V5	4/21/2015	12/3/2017
	2048-V6	04/18/2018	04/18/2023
Polyethylene D	3126-V0	6/4/2014	6/4/2019
	3126-V1	04/25/2017	6/4/2019
	3126-V2	03/29/2018	6/4/2019
Railroad Tank Car Cleaning	2235-V1	1/21/2011	1/21/2016
	2235-V2	03/03/2016	5/3/2021
Solvents/EDC ³	2188-V5AA	1/9/2015	10/7/2019
Vector SBC ¹	2025-V3	4/15/2009	6/25/2012
Vinyl II ²	2665-V7	6/25/2007	6/25/2012
Vinyl II Throx Units ²	2285-V5	5/21/2012	9/19/2016

¹Vector SBC was sold on April 1, 2011. ²Permits terminated. ³Permit transferred to Blue Cube Operations LLC on May 1 2015

II.

On or about July 25, 2015, February 16, 2016, June 28, 2016, July 7, 2016 through July 8, 2016, July 12, 2016, July 20, 2016 and April 2, 2018 the Department conducted inspections to determine the Respondent's degree of compliance with the Act and the Air Quality Regulations. On or about September 19, 2018, a subsequent file review was performed to determine the Respondent's degree of compliance with the Act and the Air Quality Regulations.

While the investigation by the Department is not yet complete, the following violations were noted during the course of the inspections and file reviews:

III.

The Respondent reported the following unauthorized releases:

	REPORT (date)	PERMIT NUMBER	PROCESS AREAS/ EMISSION POINTS	INCIDENT DATE (duration)	POLLUTANTS RELEASED (RQ)	QUANTITY REPORTED (unit)	REPORTED CAUSE
A	Unauthorized Discharge Notification Report No. T153122 (1/15/2014)	2008-V7	Polyethylene A Plant	1/4/2014	Ethylene RQ 100 lbs	52 lbs	A pressure safety relief valve was activated causing a release of ethylene to the atmosphere. Pressure on the system was removed to stop release
B	Unauthorized Discharge Notification Report No. T153634 (2/4/2014)	2008-V7	Polyethylene A Plant	1/31/2014		13 lbs	A small leak developed on process equipment causing a release of ethylene to the atmosphere. Pressure on the system was removed to stop release
C	Unauthorized Discharge Notification Report No. T153960 (2/23/2014 & 2/18/2014)	2037-V2	Chlorinated Methanes Plant	2/18/2014	Methyl Chloride RQ 130 lbs	51.3 lbs	A pressure relief valve opened to the atmosphere
D	Unauthorized Discharge Notification Report No. T154537 (3/20/2014)	2573-V7	Chlorine Plant	3/15/2014 12mins	Carbon tetrachloride RQ 10 lbs Chlorine RQ 10 lbs	279 lbs 3.2 lbs	A piece of tubing failed while in carbon tetrachloride service.
E	Unauthorized Discharge Notification Report No. T154564 (3/20/2014)	2008-V7	Polyethylene A Plant	3/18/2014	Ethylene RQ 100 lbs	42 lbs	A small leak developed on a process equipment causing a release of ethylene to the atmosphere
F	Unauthorized Discharge Notification Report No. T154603 (3/20/2014)	2188-V4	Solvents/EDC I plant	3/16/2014	Hexachloro benzene RQ 10 lbs Hexachloro butadiene RQ 10 lbs	0.2 lbs 0.4 lbs	A leak was detected when a rupture disk failed on a vessel in the solvents plant
G	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2188-V5	Storage Tank EQT1296	7/3/2014	EDC	0.06 lbs	The PVRV on Storage Tank lifted due to a pressure increase inside the Tank. EDC was released to the atmosphere during this event
H	Unauthorized Discharge Notification Report No. T1557418 (7/17/2014)	2203-V3	Glycol II Plant	7/15/2014	Ethylene Oxide RQ 10 lbs	5 lbs	Leak was discovered on a flange upstream of a rupture disk
I	Unauthorized Discharge Notification Report No. T158446 (7/17/2014)	2037-V2	Chlorine Plant	8/30/2014	Chlorine RQ 10 lbs	8.6 lbs	A leak was detected coming from a gasket on piping in chlorine service
J	Unauthorized Discharge Notification Report No. T161291 (1/23/2015)	2008-V7	Polyethylene A Plant	1/21/2015	Ethylene RQ 100 lbs	21 lbs	The packing on a gas inlet valve failed, causing a release of ethylene to the atmosphere. The valve was isolated to stop the release
K	Unauthorized Discharge Notification Report No. T161980 (3/3/2015)	2008-V7	Polyethylene A Plant	2/26/2015	Ethylene RQ 100 lbs	47 lbs	A leak was discovered on a compressor valve causing a release of ethylene to the atmosphere
L	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2188-V5	Storage Tank EQT1296	3/2/2015	EDC	0.05 lbs	The PVRV on Storage Tank lifted due to a pressure increase inside the Tank. EDC was released to the atmosphere during this event

	REPORT (date)	PERMIT NUMBER	PROCESS AREAS/EMISSION POINTS	INCIDENT DATE (duration)	POLLUTANTS RELEASED (RQ)	QUANTITY REPORTED (unit)	REPORTED CAUSE
M	Unauthorized Discharge Notification Report No. T165184 (7/28/2015)	(**Report the emission point & permit No.)		7/26/2015	Propylene Oxide RQ 100 lbs	0.6 lbs	A seal on the reactor was discovered to be leaking, causing a release to the atmosphere
					Dimethyl Ether RQ 100 lbs	20.1 lbs	
					Methyl Chloride RQ 100 lbs	8.8 lbs	
N	Unauthorized Discharge Notification Report No. T167551 (12/2/2015)	2008-V7	Polyethylene A Plant	11/27/2015 60 seconds	Ethylene RQ 100 lbs	457 lbs	A reactor experienced a temperature increase that resulted in a release to the atmosphere, no offsite impact occurred. The reactor was immediately shutdown
O	Unauthorized Discharge Notification Report No. T153772 (2/14/2014)	2024-V7	LHC III (*Report emission point)	2/10/2014 16hrs 17mins	NOx RQ 1000 lbs 35.1 lb/hr	5,046 lbs	The LHC-III plant experienced a compressor shutdown initiated by the inadvertent severing of wires during demolition. This caused a fuse failure that shutdown the propylene refrigeration compressors. The post combustion NOx emissions exceeded the maximum hourly permitted limits. A permit modification application was submitted on 2/5/2014 and Permit No. 2024-V8 issued on 2/21/2014.

The failure to control emissions is a violation of LAC 33:III.905, La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

IV.

The Respondent reported the following emission exceedances:

	REPORT (date)	PERMIT NUMBER	EMISSION POINT	INCIDENT DATE (duration)	POLLUTANTS RELEASED (permit limit)	QUANTITY REPORTED (unit)	REPORTED CAUSE	REGULATORY or PERMIT REQUIREMENTS
A	2013 Annual Compliance Certification (5/8/2014) Revised	2188-V2 2188-V3 2188-V4	Barge and Ship Opening EQT1224	2011	Carbon Tetrachloride 0.75tpy	0.81 tpy	Carbon Tetrachloride emissions exceeded permit limits due to an increase in railcar shipments of crude carbon tetrachloride that required sampling prior to off-loading. A permit modification application was submitted on 12/19/2013 and Permit No. 2188-V5 10/7/2014.	LAC 33:III.501.C.4
				2012		0.83 tpy		
				2013		0.88 tpy		
B	Unauthorized Discharge Notification Report No. T153693 (2/10/2014)	2024-V7	LHC III (*Report emission point)	1/22/2014 23hrs 15mins	NOx RQ 1000 lbs 35.1 lb/hr	4,930 lbs	The LHC-III plant experienced a compressor shutdown initiated by high level trips which caused a flaring event. NOx exceeded Title V Permit limit of 35.1lb/hr. A permit modification application was submitted on 2/5/2014 and Permit No. 2024-V8 issued on 2/21/2014.	LAC 33:III.501.C.4

	REPORT (date)	PERMIT NUMBER	EMISSION POINT	INCIDENT DATE (duration)	POLLUTANTS RELEASED (permit limit)	QUANTITY REPORTED (unit)	REPORTED CAUSE	REGULATORY or PERMIT REQUIREMENTS
C	1st Half 2014 Semiannual Monitoring Report 9/29/2014	2048-V4	Flare header EQT0995	4/24/2014 36mins	VOC 90.31 lb/hr	100.95 lb/hr	Pressure increase on the supply header caused ethylene to be flared above maximum hourly limit for VOC	LAC 33:III.501.C.4
D	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2188-V5	Pressure Swing Adsorption System EQT1223	7/2014-10/2014	Methanol 0.01 tpy	0.02 tpy	Due to unexpected plugging issues associated with the carbon beds.	LAC 33:III.501.C.4
E	2013 Annual Compliance Certification (5/8/2014) Revised	2188-V4	Thermal Treatment Unit EQT1210	12/31/2013	HCl 0.20 tpy	1.35 tpy	HCl emissions exceedance due to error in permit that was not previously identified. The previous Permit No. 2188-V3 issued on June 12, 2012, listed the limit for HCl as 1.40 tpy. The Respondent's Permit modification for Permit No. 2188-V3 submitted 9/20/2012 listed HCl emissions limit as 0.20 tpy. Permit No. 2188-V4 was issued on October 29, 2012, with HCl limit listed as 0.20 tpy. The next Permit No. 2188-V5 issued on October 7, 2014, listed the limit for HCl as 1.42 tpy.	LAC 33:III.501.C.4

Each emission exceedance is a violation of any applicable permit and associated requirement(s) listed above, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

V.

The Respondent reported the following violations from permitted operating parameters:

	REPORT (date)	PERMIT NUMBER	EMISSION POINT	INCIDENT DATE (duration)	OPERATING PARAMETER	REPORTED CAUSE	REGULATORY or PERMIT REQUIREMENTS
A	1st Half 2014 Semiannual Monitoring Report (10/2/2014) Revised	2188-V4	HCl Storage Tank EQT1213	5/6/2014-5/31/2014 15 days	Shall follow continuous compliance requirements	Scrubber associated with storage tank exceeded minimum daily pH average during four separate instances for a total of 15 days due to instrument failure on T-107A	Specific Requirement 284 40 CFR 63.9040
B	1st Half 2014 Semiannual Monitoring Report (10/2/2014) Revised	2188-V4	Storage Vessel T-305 EQT1296	6/18/2014	Maintain working pressures sufficient at all times under normal operation conditions to prevent vapor loss to the atmosphere	Storage Vessel vented to atmosphere through PVRV due to failure of a pressure transmitter.	Specific Requirement 31 LAC 33:III.2103.B
C	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2024-V8	FUG0016	10/21/2014	Components must be monitored for indications of liquids dripping from the pump seal. If a leak is detected, initiate the repair provisions specified in 40 CFR 63.163(c)	One component in LHC Ethylene Plant was repaired on 10/21/2014, 15 days after the initial monitoring and passed monitoring inspection.	Specific Requirement 330 40 CFR 63.163(c)
			FUG0018	12/10/2014		Two components in LHC Benzene Plant were repaired on 12/10/2014, 15 days after the initial monitoring and passed monitoring inspections.	

	REPORT (date)	PERMIT NUMBER	EMISSION POINT	INCIDENT DATE (duration)	OPERATING PARAMETER	REPORTED CAUSE	REGULATORY or PERMIT REQUIREMENTS
D	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2037-V2	E-455 Vent Condenser EQT0996 on DV-453 Storage Drum EQT1031	28 days during 2nd half 2014	The equipment is required to maintain a temperature of -16°C to demonstrate 98% efficiency	Vent Condenser experienced a loss of temperature monitoring data for approximately 28 days. The temperature probe failed, causing the temperature to drop to -100°C. probe was fixed and put back in service on 12/13/2014	Specific Requirement 118 40 CFR 63.119(a)(2)
E	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2179-V10	Dowtherm Furnace F-520 EQT1085	6/1/2015	Comply with 40 CFR 60 Subpart DDD	A subsequent performance test revealed that the 3 hour rolling average minimum temperature for F-520 was set too high. The furnace was retested and the appropriate minimum temperature was set.	Specific Requirement 26 LAC 33:III.2115.C
F	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2188-V5	EQT1222	1/7/2015	Shall follow continuous compliance requirements	Water absorber experienced instances of low daily average flow during this period. This was due to operational fluctuations.	Specific Requirement 42 40 CFR 63.9040
				1/8/2015			
				1/23/2015			
				1/28/2015			
G	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2188-V5	Scrubber C-501 EQT1303	1/9/2015	Shall follow continuous compliance requirements	Low daily pH during this period due to operational fluctuations.	Specific Requirement 42 40 CFR 63.9040
			Scrubber SC-1500 EQT1329	1/10/2015			
				1/11/2015			
				3/11/2015			
H	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2188-V5	Scrubber SC-500 EQT1215	2/3/2015-4/30/2015	This scrubber is regulated under the HCl MACT rule. 40 CFR 63 Subpart NNNNN. Shall follow continuous compliance requirements. The Respondent stated in electronic correspondence dated 5/24/2018, that the flow and pH were set as control parameters, to meet 40 CFR 63.9020(e).	Due to an omission in the operating discipline, the alarm values for low pH were not reset to the new values established during testing. There were 87 instances of daily pH average below the new established limits for both scrubbers	Specific Requirement 42 40 CFR 63.9040
			Scrubber A9-107B EQT1214				Specific Requirement 260 40 CFR 63.9040
I	2015 Annual Compliance Certification Report (Revised 05/19/2016)	2024-V9	Flare-FA FS-I EQT0687	12/3/2015	Heat content \geq 300BTU/scf.	Heat content to the flare dropped below 300BTU/scf at 11:00 AM	Specific Requirement 180 40 CFR 60.18(c)(3)
				12/4/2015		Heat content to the flare dropped below 300BTU/scf at 8:00 AM	

Each failure to operate according to permitted requirements is a violation of any applicable permit and associated requirement(s) listed above, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1), and 30:2057(A)(2).

VI.

The Respondent reported the following violations from monitoring requirements:

	REPORT (date)	PERMIT NUMBER	EMISSION POINT	INCIDENT DATE (duration)	MONITORING PARAMETER	REPORTED VIOLATION	REGULATORY or PERMIT REQUIREMENTS
A	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2227-V7	Cellulose plant FUG0006	8/2014	Presence of a leak monitored by visual, audible or olfactory annually	The software used to manage the Leak Detection and Repair (LDAR) program incorrectly determined the monitoring frequency for both normal and Closed Vent System (CVS) components in the Cellulose Plant. This resulted in late annual monitoring of 770 components. There were no leaks when monitoring was completed	Specific Requirement 69 40 CFR 63.172(f)(1)(ii)

	REPORT (date)	PERMIT NUMBER	EMISSION POINT	INCIDENT DATE (duration)	MONITORING PARAMETER	REPORTED VIOLATION	REGULATORY or PERMIT REQUIREMENTS
B	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2188-V5	HCl Storage Tank T-500A/B EQT1215 HCl Barge Vent Scrubber EQT1212	12/31/2014	Shall monitor as specified by 40 CFR 63.9035	Scrubber and Storage Tank missed the annual calibration in 2014 as noted in the plant's HCl Monitoring Plan required by 40 CFR 63 Subpart NNNNN HCl MACT	Specific Requirement 43 40 CFR 63.9035
C	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2024-V8	Benzene Plant FUG0018	9/15/2014 10/15/2014	Presence of a leak monitored by visual, audible or olfactory annually	78 components in the LHC Benzene Plant were monitored outside of their annual prescribed frequencies in 2013. 67 components in the LHC Benzene Plant were monitored outside of their annual prescribed frequencies in 2013.	Specific Requirement 370 40 CFR 63.172(f)(1)(ii)
D	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2179-V10	Polyethylene B Plant	6/22/2015	Presence of a leak monitored by visual, audible or olfactory weekly	LDAR components were improperly classified as exempt from monitoring in LeakDAS. This resulted in a missed monitoring event. Upon discovery the component classification was corrected and monitored.	Specific Requirement 55 LAC 33:III.2122.D.1.e
E	Annual 2015 Annual Compliance Certification (03/31/2016)	2255-V6	LHCII FUG0011	2014 1 st Quarter of 2015	Presence of a leak monitored by visual, audible or olfactory weekly	One valve in the LHC Plant was improperly classified as exempt from monitoring in LeakDAS. This resulted in a missed monitoring event. Upon discovery the component classification was corrected and monitored.	Specific Requirement 36 40 CFR 63.1024(a)

Each failure to monitor as required is a violation of any applicable permit and associated requirement(s) listed above, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(2).

VII.

The Respondent reported the following deviations from fugitive emission requirements:

	REPORT (date)	PERMIT NUMBER	EMISSION POINT	INCIDENT DATE (duration)	FUGITIVE REQUIREMENT	REPORTED VIOLATION	REGULATORY or PERMIT REQUIREMENTS
A	2013 Annual Compliance Certification (3/27/2014)	2037-V2	D-751 Storage Drum EQT1029 <i>(*Report emission point)</i>	1 st Quarter 2013 1st Quarter 2013	Components are subject to 40 CFR 63 Subpart H fugitive emission control requirements	The EDC Vent line /D-751 component was identified as being applicable to 40 CFR 63 Subpart H- HON Fugitive but was not included in the LDAR program. 175 Components were not tagged or monitored The Logistic Filter component was identified as being applicable to 40 CFR 63 Subpart H- HON Fugitive but was not included in the LDAR program. 97 Components were not tagged or monitored	40 CFR 63 Subpart H
B	2013 Annual Compliance Certification (3/27/2014)	2037-V2	Tank T262 EQT1049	11/2013	Components are subject to 40 CFR 63 Subpart H fugitive emission control requirements	The T-262 component was identified as being applicable to 40 CFR 63 Subpart H- HON Fugitive but was not included in the LDAR program. 173 Components were not tagged or monitored	40 CFR 63 Subpart H
C	2013 Annual Compliance Certification (3/27/2014)	2255-V6	LHC II	7/17/2013	Comply with the equipment leak requirements at all times except during periods of shutdown, malfunction or period of non-operation	One open ended line was found in the LHC II Ethylene Plant	Specific Requirement 127 40 CFR 63.1108(a)(2)

	REPORT (date)	PERMIT NUMBER	EMISSION POINT	INCIDENT DATE (duration)	FUGITIVE REQUIREMENT	REPORTED VIOLATION	REGULATORY or PERMIT REQUIREMENTS
D	2013 Annual Compliance Certification (3/27/2014)	2024-V7	Tank T- 1605A EQT0673 Tank T- 1706B EQT0691	12/18/2013	Initiate repairs of seal wipers within 7 working days after defect is identified	Repairs were not initiated on T-1605A and T-1706B secondary seal wipers within 7 working days of discovery and recognition of defective conditions. The Respondent's internal inspection report was received on 12/10/2013 and inspection and repair plans were not discussed until 12/17/13.	Specific Requirement 113 LAC 33:III.2103.D.4.d
E	2013 Annual Compliance Certification (3/27/2014)	2048-V4	Polyethylene C Plant	10/2013	Components are subject to 40 CFR 63 Subpart H fugitive emission control requirements	The Polyethylene C Plant is subject to the Louisiana Consolidated Fugitive Emissions Program and as such complies with 40 CFR 63 Subpart H. While adding additional components at the plant, it revealed that approximately 1,200 components had not been included in the LDAR monitoring program	LAC 33:III.2122
F	1st Half 2014 Semiannual Monitoring Report (10/2/2014) Revised	2188-V4	Solvent EDC Plant Compressor K-5B and K- 5D	2/1/2014	Components are subject to 40 CFR 63 Subpart H fugitive emission control requirements	The compressor K-5B and K-5D are subject to HON Subpart H, but leak criteria had not been determined. There was no indication of seal failure or evidence of leaks during this period and results of daily sensor observations not recorded	40 CFR 63 Subpart H
G	1st Half 2014 Semiannual Monitoring Report (10/2/2014) Revised	2188-V4	Storage Vessel T-107 EQT1290 Storage Vessel T-108 EQT1291	2/21/2014	Components are subject to 40 CFR 63 Subpart H fugitive emission control requirements	T-107/T-108 components were identified as being applicable to 40 CFR 63 Subpart H- HON Fugitive but were not included in the LDAR program. 209 Components were not tagged or monitored	40 CFR 63 Subpart H
H	1st Half 2014 Semiannual Monitoring Report (10/2/2014) Revised	2203-V3	Glycol II Plant	3/2014	Components are subject to fugitive emission control requirements	Approximately 12 components were discovered to be subjected to the Louisiana Consolidated Fugitive Emissions Program and had not been included in the LDAR monitoring program.	LAC 33:III.2121
I	1st Half 2014 Semiannual Monitoring Report (10/2/2014) Revised	2048-V4	Polyethylene C Plant	5/14/2014	Components are subject to 40 CFR 63 Subpart H fugitive emission control requirements	The Polyethylene C Plant is subject to the Louisiana Consolidated Fugitive Emissions Program and as such complies with 40 CFR 63 Subpart H. While adding additional components at the plant, it revealed that approximately 24 components had not been included in the LDAR monitoring program	40 CFR 63 Subpart H
J	1st Half 2014 Semiannual Monitoring Report (10/2/2014) Revised	2024-V8	LHC III	6/2/2014	Open ended valves or lines shall be sealed with caps, blind flange, plug or second valve at all times	Two open ended lines were found in Block 110	Specific Requirement 357 40 CFR 63.167(a)(1)
K	1st Half 2014 Semiannual Monitoring Report (10/2/2014) Revised	2008-V7	Polyethylene A Plant	6/14/2014	Components are subject fugitive emission control requirements Components are subjected to fugitive emission control requirements	The Polyethylene A Plant is subject to the Louisiana Consolidated Fugitive Emissions Program and as such complies with 40 CFR 63 Subpart H. While adding additional components at the plant, it revealed that approximately 38 components had not been included in the LDAR monitoring program	LAC 33:III.2122
L	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2179-V9	Polyethylene B Plant	7/2014	Components are subject fugitive emission control requirements	The Polyethylene B Plant is subject to the Louisiana Consolidated Fugitive Emissions Program and as such complies with 40 CFR 63 Subpart H. While adding additional components at the plant, it revealed that 44 components had not been included in the LDAR monitoring program	LAC 33:III.2122
M	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2188-V4	Solvent EDC Plant	8/2014	Components are subject to 40 CFR 63 Subpart H fugitive emission control requirements	The following components were identified as being applicable to 40 CFR 63 Subpart H- HON Fugitive but were not included in the LDAR program. 904 connectors, 308 valves, 12 relief devices, 7 instrument system and 4 pumps.	40 CFR 63 Subpart H

	REPORT (date)	PERMIT NUMBER	EMISSION POINT	INCIDENT DATE (duration)	FUGITIVE REQUIREMENT	REPORTED VIOLATION	REGULATORY or PERMIT REQUIREMENTS
N	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2024-V8	LHC III	8/21/2014	Open ended valves or lines shall be sealed with caps, blind flange, plug or second valve at all times	One open ended line was found in the LHC III Ethylene Plant	Specific Requirement 357 40 CFR 63.167(a)(1)
				8/25/2014			
				10/22/2014			
				10/29/2014			
O	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2008-V7	Polyethylene A Plant	10/2014	Components are subject fugitive emission control requirements	The Polyethylene A Plant is subject to the Louisiana Consolidated Fugitive Emissions Program. Under this program the plant complies with 40 CFR 63 Subpart H. A recent addition of components at the plant revealed that 1 component had not been included in the LDAR monitoring program	LAC 33:III.2122
P	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2024-V8	LHC III	10/14/2014	Open ended valves or lines shall be sealed with caps, blind flange, plug or second valve at all times	Four open ended lines were found in the LHC III Ethylene Unit	Specific Requirement 357 40 CFR 63.167(a)(1)
Q	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2203-V3	Glycol II Plant	11/4/2014		One open ended line was found in the Glycol II Plant	Specific Requirement 149 40 CFR 63.167(a)(1)
R	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2227-V7	Cellulose Plant	2/10/2015	Open ended valves or lines shall be sealed with caps, blind flange, plug or second valve at all times	Three open ended lines were found in the Cellulose Plant. The open ended lines were immediately plugged on discovery	Specific Requirement 59 40 CFR 63.167(a)(1)
S	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2227-V7	Cellulose Plant	6/25/2015	Components are subject fugitive emission control requirements	LDAR components were placed into service without conducting initial monitoring within the required time frame. Upon discovery, the components were tagged and monitored; there were no leakages	LAC 33:III.2122
T	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2037-V2	Chlorinated Methane Plant	3/20/2015	Open ended valves or lines shall be sealed with caps, blind flange, plug or second valve at all times	During Routine LDAR rounds, two open ended lines were identified, T-90 and T-104B. Plugs were immediately installed and component monitored	Specific Requirement 196 40 CFR 63.167(a)(1)
				4/15/2015			
U	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2203-V3	Glycol II Plant	4/9/2015	Components are subject to fugitive emission control requirements	Two components in the Glycol II Plant were repaired outside the 15 day requirements. Upon discovery components were repaired and monitored	LAC 33:III.2122
V	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2024-V8	LHC III	4/29/2015	Open ended valves or lines shall be sealed with caps, blind flange, plug or second valve at all times	One open ended line was found in the LHC III Ethylene Unit. The open ended line was plugged	Specific Requirement 357 40 CFR 63.167(a)(1)
W	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2255-V6	LHC II	3/3/2015	Comply with the equipment leak requirements at all times except during periods of shutdown, malfunction or period of non-operation	One open ended line was found in the LHC II Ethylene Unit. The open ended line was plugged	Specific Requirement 127 40 CFR 63.1108(a)(2)
				2/6/2015		Two open ended lines were found in the LHC II Ethylene Unit. The open ended lines were plugged	
X	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2008-V7	Polyethylene A Plant	2/3/2015	Components are subject fugitive emission control requirements	LDAR components were placed into service without conducting initial monitoring within the required time frame. Upon discovery, the components were tagged and monitored. There were no leakages	LAC 33:III.2122
Y	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2008-V7	Polyethylene A Plant	4/20/2015	Open ended valves or lines shall be sealed with caps, blind flange, plug or second valve at all times	One open ended line was found in the Polyethylene A Plant. The open ended line was plugged	LAC 33:III.2122

	REPORT (date)	PERMIT NUMBER	EMISSION POINT	INCIDENT DATE (duration)	FUGITIVE REQUIREMENT	REPORTED VIOLATION	REGULATORY or PERMIT REQUIREMENTS
Z	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2179-V9	Polyethylene B Plant	4/22/2015	Open ended valves or lines shall be sealed with caps, blind flange, plug or second valve at all times	Three open ended lines were found in the Polyethylene B Plant Unit. The open ended lines were plugged	LAC 33:III.2122
AA	1st Half 2015 Semiannual Monitoring Report (9/29/2015)	2188-V3	Solvent EDC Plant	3/18/2015	Open ended valves or lines shall be sealed with caps, blind flange, plug or second valve at all times except during maintenance	Two open ended lines were found in the Solvent EDC Plant. The open ended lines were plugged	Specific Requirement 213 40 CFR 63.167(a)(1)
				3/24/2015			
BB	2nd Half 2014 Semiannual Monitoring Report (3/30/2015)	2179-V9	Polyethylene B Plant	December 2014	Components are subject fugitive emission control requirements Components are subjected fugitive emission control requirements	The Polyethylene B Plant is subject to the Louisiana Consolidated Fugitive Emissions Program and as such complies with 40 CFR 63 Subpart H. A recent addition of components at the plant revealed that 165 components had not been included in the LDAR monitoring program	LAC 33:III.2122
CC	2nd Half 2015 Semiannual Monitoring Report (3/31/2016)	2007-V3	Glycol I Plant	8/24/2015	Open ended valves or lines shall be sealed with caps, blind flange, plug or second valve at all times	One open ended line was found in the Glycol I Plant. The line was immediately plugged upon discovery	Specific Requirement 251 40 CFR 63.167(a)(1)
DD	2nd Half 2015 Semiannual Monitoring Report (3/31/2016)	2203-V3	Glycol II Plant	7/15/2015	Components are subject to fugitive emission control requirements	2 Pumps were inadvertently not included in the percent fugitive leaking calculation. Upon discovery, the pumps were tagged and added.	LAC 33:III.2122
EE	2nd Half 2015 Semiannual Monitoring Report (3/31/2016)	2203-V3	Glycol II Plant	9/22/2015	Components are subject to fugitive emission control requirements	Six valves were inappropriately classified as exempt from monitoring. Upon discovery the component classification was corrected in LeakDAS. The components have subsequently been monitored	LAC 33:III.2122
FF	2nd Half 2015 Semiannual Monitoring Report (3/31/2016)	2255-V6	LHC II	2014 and 2015	Components are subject to fugitive emission control requirements	One valve in the LHC II Plant was improperly classified as exempt for monitoring in LeakDAS. This resulted in missing monitoring events in 2014 and 1 st Quarter 2015. Classification was changed and component monitored.	40 CFR 63 Subpart UU
GG	2nd Half 2015 Semiannual Monitoring Report (3/31/2016)	2255-V6	LHC II	7/6/2015	Components are subject to fugitive emission control requirements	Missed monitoring discovered on 6 Close Vent System (CVS) components in LHC II Plant that were improperly classified as exempt for Method 21 monitoring. Classification in the monitoring database was updated	40 CFR 63 Subpart UU
				11/5/2015		Missed monitoring discovered on 70 CVS components in LHC II Plant that were improperly classified as exempt for Method 21 monitoring. Classification in the monitoring database was updated	
HH	2nd Half 2015 Semiannual Monitoring Report (3/31/2016)	2024-V9	LHC III	9/22/2015	Components are subject to fugitive emission control requirements	Missed monitoring discovered on 10 valves in LHC III Benzene Plant that were improperly classified as exempt for Method 21 monitoring. Classification in the monitoring database was updated	LAC 33:III.2122
II	2nd Half 2015 Semiannual Monitoring Report (3/31/2016)	2024-V9	LHC III	9/22/2015	Components are subject to fugitive emission control requirements	Missed monitoring discovered on 9 valves in LHC III Ethylene Plant that were improperly classified as exempt for Method 21 monitoring. Classification in the monitoring database was updated	LAC 33:III.2122

	REPORT (date)	PERMIT NUMBER	EMISSION POINT	INCIDENT DATE (duration)	FUGITIVE REQUIREMENT	REPORTED VIOLATION	REGULATORY or PERMIT REQUIREMENTS
JJ	2nd Half 2015 Semiannual Monitoring Report (3/31/2016)	2024-V9	LHC III	7/29/2015	Open ended valves or lines shall be sealed with caps, blind flange, plug or second valve at all times	One open ended line was found on each day listed in the LHC III Ethylene plant. The line was immediately plugged upon discovery	Specific Requirement 362 40 CFR 63.167(a)(1)
				8/5/2015			
				8/6/2015			
				8/11/2015			
				10/7/2015	Open ended valves or lines shall be sealed with caps, blind flange, plug or second valve at all times	Two open ended lines were found in the LHC III Ethylene. The open ended lines were plugged	
KK	2nd Half 2015 Semiannual Monitoring Report (3/31/2016)	2024-V9	LHC III	10/26/2015	Open ended valves or lines shall be sealed with caps, blind flange, plug or second valve at all times	One open ended line was found in the LHC III Benzene. The line was immediately plugged upon discovery	Specific Requirement 362 40 CFR 63.167(a)(1)
LL	2nd Half 2015 Semiannual Monitoring Report (3/31/2016)	2024-V9	LHC III	11/23/2015	Components are subject to fugitive emission control requirements	Missed monitoring for 2 nd and 3 rd Quarter 2015 discovered on 38 valves in LHC III Ethylene Plant that were improperly classified as unsafe to monitor	LAC 33:III 2122
MM	2nd Half 2015 Semiannual Monitoring Report (3/31/2016)	2048-V5	Polyethylene C Plant	9/1/2015	Components are subject to 40 CFR 63 Subpart H fugitive emission control requirements	16 LDAR components in the Poly C Plant were improperly classified as exempt for monitoring in LeakDAS. This resulted in missed monitoring event. Upon discovery the components were classified correctly and monitored	40 CFR 63 Subpart H

Each failure to meet fugitive emission requirements is a violation of any applicable permit and associated requirement(s) listed above, LAC 33:III.501.C.4, LAC 33:III.2122.C.3, La. R.S. 30:2057(A)(1)(2).

VIII.

In the 1st Half 2014 Semiannual Monitoring Report dated September 29, 2014, the Respondent reported that the Periodic RATA (Relative Accuracy Test Audit) reports for Duct Burn Gas (EQT 0876)/Turbine GT-200 and Gas Turbine GT-300 were not submitted within 60 (sixty) days as required by LAC 33:III.2201.I.1. Specifically, the Duct Burn Gas Turbine GT-200 RATA was due on February 6, 2014 and Gas Turbine GT-300 RATA was due February 13, 2014. This is a violation of Title V Permit No. 2267-V6, LAC 33:III.501.C.4, La. R.S. 30:2057(A) (2). The reports were submitted to the Department on April 29, 2014.

IX.

In the 1st Half 2014 Semiannual Monitoring Report dated September 29, 2014, the Respondent reported that, on or about December 1, 2013, initial performance testing for the Diesel Powered Water Well Engines #5 - #9 (EQT0457 - EQT0461) was not completed within the required 180 days of applicability for RICE MACT. Delays were due to unforeseen mechanical issues with the required compliance modifications. Failure to complete initial performance testing within the required 180 days is

a violation of Title V Permit No. 2190-V3, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(2). The testing was completed in June 2014.

X.

In the 1st Half 2014 Semiannual Monitoring Report dated September 29, 2014, the Respondent reported that, on or about April 1, 2014, initial performance testing for the Diesel Powered Water Well Engines #1 - #4 (EQT0453 - EQT0456) was not completed within the required 180 days of applicability to RICE MACT. Delays were due to unforeseen mechanical issues with the required compliance modifications. Failure to complete initial performance testing within the required 180 days is a violation of Title V Permit No. 2190-V3, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(2). The testing was completed in June 2014.

XI.

In the 2014 Annual Compliance Report dated March 30, 2015, the Respondent reported that, on or about October 29, 2014, a Comprehensive Performance Test (CPT) for Thermal Treatment Unit (R-4 TTU) (EQT 0762) was performed as required by HWC MACT. The test results indicated an elevated concentration of total chlorine for 10.75 hours during all three test runs. Failure to comply with emission limitations for total chlorine is a violation of Specific Requirement 40 of Title V Permit No. 2007-V5, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1) and 30:2057(A)(2). The Respondent reported that a CPT was performed in December 2014, all emission standards were met.

XII.

In the 2nd Half 2014 Semiannual Monitoring Report dated March 30, 2015, the Respondent reported that, on or about July 3, 2014, a CPT for F-700 TTU (EQT 1210) was performed as required by HWC MACT. The test results indicated an elevated concentration of low-volatile metals (arsenic, beryllium and chromium) for a total of 13.75 hours during three test runs. Failure to comply with emission limitations for low-volatile metals is a violation of Specific Requirement 65 of Title V Permit No. 2188-V4, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1) and 30:2057(A)(2). A repeat CPT was performed in October 2014, all emission standards were met.

XIII.

In the 2nd Half 2014 Semiannual Monitoring Report dated March 30, 2015, the Respondent reported that during a compliance review of equipment applicable to 40 CFR Part 63 Subpart NNNNN (HCl MACT) in November 2014, it was identified that subsequent performance tests as required by 40 CFR 63.9015, were not completed for the emission points below:

	EQUIPMENT ID EQUIPMENT NAME	TEST DUE DATE
A	EQT 1222 C-81 Water Scrubber	October 1, 2011
B	EQT 1213 SC-500 Water Absorber	September 1, 2011
C	EQT 1213 SC-107A Water Absorber	August 1, 2013
D	EQT 1214 SC-107B Water Absorber	August 1, 2013

Each failure to complete subsequent performance tests is a violation of Title V Permit No. 2188-V4, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(2). Performance testing was completed in January 2015, and test results were submitted in March 2015.

XIV.

In the 1st Half 2015 Semiannual Monitoring Report dated September 29, 2015, the Respondent reported that on or about March 31, 2015, the Pressure Safety Valve on the Propylene Oxide Storage Tank DV-7401 (EQT0771) in the Glycol I Plant malfunctioned, lifting at 3.7 psig instead of designed pressure of 4.5psig. The malfunction was believed to be due to silicone in the sensing chamber port during valve assembly. The Respondent reported that the valve was taken out of service and replaced by a spare valve.

XV.

In the 2nd Half 2015 Semiannual Monitoring Report dated March 31, 2016, the Respondent reported that the B-20D Blower Exhaust (B-20D) and BV-20C Bin Vent for Hopper HO-20C (BV-20C), were inadvertently left out of the previous Cellulose Plant Title V air permit application. The failure to submit a permit modification prior to their installation is a violation of LAC 33:III.501.C.1, La. R.S. 30:2057(A)(2). In electronic correspondence dated April 7, 2016, the Respondent reported that equipment (B-20D) and (BV-20C) were in operation prior to the inclusion in Permit No. 2227-V7, issued October 14, 2011. The unpermitted operation of (B-20D) and (BV-20C) is a violation of LAC 33:III.501.C.2, La. R.S. 30:2057(A)(1) and 30:2057(A)(2). On or about April 30, 2016 the Respondent submitted an application to add these sources. The modified permit was issued on September 27, 2016.

XVI.

In the 2nd Half 2015 Semiannual Monitoring Report dated March 31, 2016, the Respondent reported that the Diethylene Glycol (DEG) Storage Tank T-105 and DEG Tank Car Loading were inadvertently not included in the Glycol 2 Title V Air Permit No. 2203-V3 renewal. In electronic correspondence dated November 7, 2018, the Respondent reported that the DEG tank was in service and loading operations began on September 22, 2015. LAC 33:III.501.B.5 states "no exemption listed in the

following table shall become effective until approved by the administrator in accordance with 40 CFR Part 70". The unauthorized operation of DEG storage tank T-105 and DEG tank car loading is a violation of LAC 33:III.501.C.2, La. R.S. 30:2057(A)(1) and 30:2057(A)(2). Upon discovery a "Case-by-case Insignificant Activity Notification was submitted under Glycol 2's air Permit No. 2203-V4 for DEG storage tank T-105 and DEG tank car loading on October 22, 2015 and was approved October 26, 2015.

XVII.

In the 2nd Half 2015 Semiannual Monitoring Report dated March 31, 2016, the Respondent reported that an emission calculation error was discovered for EQT1092 (F-500). One drying air vent to the furnace was inadvertently omitted from the emission calculation. The error affects the annual emission limit for VOC. In electronic correspondence dated April 7, 2016, the Respondent reported that the emission calculation was corrected and included in the Title V renewal application which was submitted on August 15, 2015. The current Permit No. 2179-V10 authorizes 0.76 tpy VOC for EQT1092. The Respondent reported that the additional amount of VOC omitted from the emission calculation totals 0.65 tpy VOC; therefore, the permitted 0.76 tpy VOC for EQT1092 was exceeded by 0.65 tpy VOC. The Respondent proposed an emission rate of 2.14 tpy in the Title V renewal application submitted on August 15, 2015. The emission exceedance of the permitted VOC limit is a violation of Title Permit No. 2179-V10, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

XVIII.

On or about February 21, 2018, the Respondent submitted a permit modification application to Title V Permit No. 2008-V10 issued on January 29, 2018. The application incorporated emission points into the permit that were inadvertently omitted from the previous permit application. Specifically, the permit modification application included emissions from the Polyethylene A Plant extruder rear seals (EQT1576, EQT1577, EQT1578, EQT1579, GRP192) and emissions from the Polyethylene A Plant Scrap Bins (EQT1580). The emission points were included in Title V Air Permit No. 2008-V11 issued on April 5, 2018. The Respondent's failure to submit a permit application prior to construction, reconstruction, or modification of the facility is a violation of LAC 33:III.501.C.1, and La. R.S. 30:2057(A)(2).

COMPLIANCE ORDER

Based on the foregoing, the Respondent is hereby ordered:

I.

To take, immediately upon receipt of this **COMPLIANCE ORDER**, any and all steps necessary to meet and maintain compliance with the Act, the Air Quality Regulations, and all applicable permits.

II.

To submit to the Enforcement Division, within sixty (60) days after receipt of this **COMPLIANCE ORDER**, a written report that includes required information as denoted by asterisks (**Report emission point*) and (***Report the plant & permit No.*) in paragraphs III, IV, and VII of the Findings of Fact.

III.

To submit to the Enforcement Division, within sixty (60) days after receipt of this **COMPLIANCE ORDER**, a written report which explains if there was any pollutant(s) released, the quantity which was released and the duration of the incident as referenced in paragraph XIV of the Findings of Fact.

IV.

To submit to the Enforcement Division, within sixty (60) days after receipt of this **COMPLIANCE ORDER**, a written report which explains in detail the cause of incident (T153960) that occurred on February 18, 2014, as referenced in paragraph III. C of the Findings of Fact.

V.

To submit to the Enforcement Division, within thirty (60) days after receipt of this **COMPLIANCE ORDER**, a written report that includes a detailed description of the circumstances surrounding the cited violations and actions taken or to be taken to achieve compliance with the Order Portion of this **COMPLIANCE ORDER**. This report and all other reports or information required to be submitted to the Enforcement Division by this **COMPLIANCE ORDER** shall be submitted to:

Office of Environmental Compliance
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: **Madison Kirkland**
Re: **Enforcement Tracking No. AE-CN-15-00394**
Agency Interest No. 1409

THE RESPONDENT SHALL FURTHER BE ON NOTICE THAT:

I.

The Respondent has a right to an adjudicatory hearing on a disputed issue of material fact or of law arising from this **COMPLIANCE ORDER**. This right may be exercised by filing a written request with the Secretary no later than thirty (30) days after receipt of this **COMPLIANCE ORDER**.

II.

The request for an adjudicatory hearing shall specify the provisions of the **COMPLIANCE ORDER** on which the hearing is requested and shall briefly describe the basis for the request. This request should reference the Enforcement Tracking Number and Agency Interest Number, which are located in the upper right-hand corner of the first page of this document and should be directed to the following:

Department of Environmental Quality
Office of the Secretary
Post Office Box 4302
Baton Rouge, Louisiana 70821-4302
Attn: Hearings Clerk, Legal Division
Re: Enforcement Tracking No. AE-CN-15-00394
Agency Interest No. 1409

III.

Upon the Respondent's timely filing a request for a hearing, a hearing on the disputed issue of material fact or of law regarding this **COMPLIANCE ORDER** may be scheduled by the Secretary of the Department. The hearing shall be governed by the Act, the Administrative Procedure Act (La. R.S. 49:950, et seq.), and the Department's Rules of Procedure. The Department may amend or supplement this **COMPLIANCE ORDER** prior to the hearing, after providing sufficient notice and an opportunity for the preparation of a defense for the hearing.

IV.

This **COMPLIANCE ORDER** shall become a final enforcement action unless the request for hearing is timely filed. Failure to timely request a hearing constitutes a waiver of the Respondent's right to a hearing on a disputed issue of material fact or of law under Section 2050.4 of the Act for the violation(s) described herein.

V.

The Respondent's failure to request a hearing or to file an appeal or the Respondent's withdrawal of a request for hearing on this **COMPLIANCE ORDER** shall not preclude the Respondent from contesting the findings of facts in any subsequent penalty action addressing the same violation(s), although the Respondent is estopped from objecting to this **COMPLIANCE ORDER** becoming a permanent part of its compliance history.

VI.

Civil penalties of not more than twenty-seven thousand five hundred dollars (\$27,500) for each day of violation for the violation(s) described herein may be assessed. For violations which occurred on August 15, 2004, or after, civil penalties of not more than thirty-two thousand five hundred dollars

(\$32,500) may be assessed for each day of violation. The Respondent's failure or refusal to comply with this **COMPLIANCE ORDER** and the provisions herein will subject the Respondent to possible enforcement procedures under La. R.S. 30:2025, which could result in the assessment of a civil penalty in an amount of not more than fifty thousand dollars (\$50,000) for each day of continued violation or noncompliance.

VII.

For each violation described herein, the Department reserves the right to seek civil penalties in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties.

NOTICE OF POTENTIAL PENALTY

I.

Pursuant to La. R.S. 30:2050.3(B), you are hereby notified that the issuance of a penalty assessment is being considered for the violation(s) described herein. Written comments may be filed regarding the violation(s) and the contemplated penalty. If you elect to submit comments, it is requested that they be submitted within ten (10) days of receipt of this notice.

II.

Prior to the issuance of additional appropriate enforcement action(s), you may request a meeting with the Department to present any mitigating circumstances concerning the violation(s). If you would like to have such a meeting, please contact Madison Kirkland at (225) 219-3165 within ten (10) days of receipt of this **NOTICE OF POTENTIAL PENALTY**.

III.

The Department is required by La. R.S. 30:2025(E)(3)(a) to consider the gross revenues of the Respondent and the monetary benefits of noncompliance to determine whether a penalty will be assessed and the amount of such penalty. Please forward the Respondent's most current annual gross revenue statement along with a statement of the monetary benefits of noncompliance for the cited violation(s) to the above named contact person within ten (10) days of receipt of this **NOTICE OF POTENTIAL PENALTY**. Include with your statement of monetary benefits the method(s) you utilized to arrive at the sum. If you assert that no monetary benefits have been gained, you are to fully justify that statement. If the Respondent chooses not to submit the requested most current annual gross revenues statement within ten (10) days, it will be viewed by the Department as an admission that the Respondent has the ability to pay the statutory maximum penalty as outlined in La. R.S. 30:2025.

IV.

The Department assesses civil penalties based on LAC 33:I.Subpart1.Chapter7. To expedite closure of this **NOTICE OF POTENTIAL PENALTY** portion, the Respondent may offer a settlement amount to resolve any claim for civil penalties for the violation(s) described herein. The Respondent may offer a settlement amount, but the Department is under no obligation to enter into settlement negotiations. The decision to proceed with a settlement is at the discretion of the Department. The settlement offer amount may be entered on the attached "**CONSOLIDATED COMPLIANCE ORDER AND NOTICE OF POTENTIAL PENALTY REQUEST TO CLOSE**" form. The Respondent must include a justification of the offer. **DO NOT** submit payment of the offer amount with the form. The Department will review the settlement offer and notify the Respondent as to whether the offer is or is not accepted.

V.

This **CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY** is effective upon receipt.

Baton Rouge, Louisiana, this 21st day of December, 2018.



Lourdes Iturralde
Assistant Secretary
Office of Environmental Compliance

Copies of a request for a hearing and/or related correspondence should be sent to:

Louisiana Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
P.O. Box 4312
Baton Rouge, LA 70821-4312
Attention: Madison Kirkland

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
 OFFICE OF ENVIRONMENTAL COMPLIANCE
 ENFORCEMENT DIVISION
 POST OFFICE BOX 4312
 BATON ROUGE, LOUISIANA 70821-4312

CONSOLIDATED COMPLIANCE ORDER &
 NOTICE OF POTENTIAL PENALTY
 REQUEST TO CLOSE



Enforcement Tracking No.	AE-CN-15-00394	Contact Name	Madison Kirkland
Agency Interest (AI) No.	1409	Contact Phone No.	(225) 219-3165
Alternate ID No.	1280-00008		
Respondent:	The Dow Chemical Company	Facility Name:	Dow Chemical Co-Louisiana Operations
	c/o C T Corporation System	Physical Location:	21255 Louisiana Highway 1
	Agent for Service of Process		
	3867 Plaza Tower Drive	City, State, Zip:	Plaquemine, LA 70765
	Baton Rouge, LA 70816	Parish:	Iberville

STATEMENT OF COMPLIANCE

STATEMENT OF COMPLIANCE	Date Completed	Copy Attached?
All necessary documents were submitted to the Department within 60 days of receipt of the COMPLIANCE ORDER in accordance with Paragraph II, III, IV, and V of the "Order" portion of the COMPLIANCE ORDER.		
All items in the "Findings of Fact" portion of the COMPLIANCE ORDER were addressed and the facility is being operated to meet and maintain the requirements of the "Order" portion of the COMPLIANCE ORDER. Final compliance was achieved as of:		

SETTLEMENT OFFER (OPTIONAL)

(check the applicable option)

<input type="checkbox"/>	The Respondent is not interested in entering into settlement negotiations with the Department with the understanding that the Department has the right to assess civil penalties based on LAC 33:1.Subpart1.Chapter7.
<input type="checkbox"/>	In order to resolve any claim for civil penalties for the violations in NOTICE OF POTENTIAL PENALTY (AE-CN-15-00394), the Respondent is interested in entering into settlement negotiations with the Department and would like to set up a meeting to discuss settlement procedures.
<input type="checkbox"/>	In order to resolve any claim for civil penalties for the violations in NOTICE OF POTENTIAL PENALTY (AE-CN-15-00394), the Respondent is interested in entering into settlement negotiations with the Department and offers to pay \$ _____ which shall include LDEQ enforcement costs and any monetary benefit of non-compliance. <ul style="list-style-type: none"> • Monetary component = \$ _____ • Beneficial Environmental Project (BEP) component (optional)= \$ _____ • DO NOT SUBMIT PAYMENT OF THE OFFER WITH THIS FORM- the Department will review the settlement offer and notify the Respondent as to whether the offer is or is not accepted. -
<input type="checkbox"/>	The Respondent has reviewed the violations noted in NOTICE OF POTENTIAL PENALTY (AE-CN-15-00394) and has attached a justification of its offer and a description of any BEPs if included in settlement offer.

CERTIFICATION STATEMENT

I certify, under provisions in Louisiana and United States law that provide criminal penalties for false statements, that based on information and belief formed after reasonable inquiry, the statements and information attached and the compliance statement above, are true, accurate, and complete. I also certify that I do not owe outstanding fees or penalties to the Department for this facility or any other facility I own or operate. I further certify that I am either the Respondent or an authorized representative of the Respondent.

--	--	--

Respondent's Signature	Respondent's Printed Name	Respondent's Title	
Respondent's Physical Address		Respondent's Phone #	Date
MAIL COMPLETED DOCUMENT TO THE ADDRESS BELOW:			
Louisiana Department of Environmental Quality Office of Environmental Compliance Enforcement Division P.O. Box 4312 Baton Rouge, LA 70821 Attn: Madison Kirkland			



JOHN BEL EDWARDS
GOVERNOR

CHUCK CARR BROWN, Ph.D.
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE

July 1, 2021



CERTIFIED MAIL (7019 2970 0000 6032 9449)
RETURN RECEIPT REQUESTED

THE DOW CHEMICAL COMPANY
c/o C T Corporation System
Agent for Service of Process
3867 Plaza Tower Drive
Baton Rouge, LA 70816

**RE: NOTICE OF POTENTIAL PENALTY
ENFORCEMENT TRACKING NO. AE-PP-20-00320
AGENCY INTEREST NO. 1409**

Dear Sir/Madam:

On or about January 27, 2020, June 10, 2020, and July 3, 2020, inspections of **DOW CHEMICAL CO-LOUISIANA OPERATIONS** (the facility), a Specialty Chemical facility owned and/or operated by **THE DOW CHEMICAL COMPANY (RESPONDENT)**, were performed to determine the degree of compliance with the Louisiana Environmental Quality Act (the Act) and the Air Quality Regulations. The facility is located at 21255 Louisiana Highway 1 in Plaquemine, Iberville Parish, Louisiana. The facility is subject to the Chemical Accident Prevention Provisions (CAPP) program level 3 requirements. The Respondent operates or has operated under the authority of the following Title V Air Quality Permits:

PLANT	PERMIT	ISSUE DATE	EXPIRATION DATE
Glycol I	2007-V7	01/23/2018	01/23/2023
	2203-V8	05/21/2021	05/21/2026
Glycol II	2203-V7	04/27/2020	09/11/2020
	2203-V6	07/23/2019	09/11/2020
Light Hydrocarbon II	2255-V7	08/23/2016	08/23/2021
	2255-V6	12/23/2013	12/01/2015
Light Hydrocarbon III	2024-V12	01/30/2019	01/23/2023
	2024-V11	08/06/2018	01/23/2023
	2024-V10AA	05/15/2018	01/23/2023
Polyethylene D	3126-V4	08/01/2019	03/01/2024
	3126-V3	11/28/2018	06/04/2019
	3126-V2	03/29/2018	06/04/2019

The Dow Chemical Company
AE-PP-20-00320
Page 2

While the investigation by the Louisiana Department of Environmental Quality (the Department) is not yet complete, the following violations were noted during the course of the inspections and subsequent file review conducted on June 11, 2021:

- A. On or about January 27, 2020, the Respondent experienced an unauthorized discharge (Incident No. T195255) from the Glycol II Unit, T-7 Vent (EQT0246). Specifically, at approximately 16:03 hours, the Respondent was swapping out absorber water pumps in the facility's Glycol II Unit, but EQT0246 lost its absorber water, which caused the overhead vent to open and release ethylene oxide to the atmosphere. EQT0246 is a two (2) pump vent-reduction system used to remove ethylene oxide from the incoming process vent stream. The system lost the absorber water after an operator accidentally switched an auxiliary pump off, leaving the system with one (1) running pump causing low discharge pressure, which triggered a safety mechanism and resulted in the release of ethylene oxide to atmosphere for seven (7) minutes. The incident resulted in a release of approximately 251 pounds of ethylene oxide to the atmosphere from EQT0246, which is permitted to discharge forty (40) pounds of ethylene oxide per hour. The release ended at 16:10 hours when absorber water was added back to EQT0246. In correspondence dated January 31, 2020, the Respondent deemed the incident to be preventable. The failure to operate within the permit limits set forth in Title V Air Permit No. 2203-V6 is a violation of LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1) and 30:2057(A)(2). The failure to use and maintain air pollution control facilities, any device or contrivance, operating procedure, or abatement scheme used to prevent or reduce air pollution, whenever emissions are being made which can be controlled by the facility is a violation of LAC 33:III.905.A. In correspondence dated May 26, 2020, the Respondent stated that covers have been installed on the pump switches to prevent them from being inadvertently shut down, and the computer logic was changed to only shut off the water flow to the tower when all three (3) pumps are down.
- B. On or about June 10, 2020, the Respondent experienced an unauthorized discharge (Incident No. T197270) from the Glycol II Unit, D-370 Vent (RLP0087). Specifically, at approximately 12:37 hours, the Respondent experienced a unit upset, which activated the safety instrument system to trip absorber water on low pump amps. Plant backup electrical feed immediately restored power and the absorber water was added back into the process system at approximately 12:53 hours. The incident resulted in a release of approximately 26.54 pounds of ethylene oxide to the atmosphere from RLP0087, which is permitted to discharge 2.97 pounds of ethylene oxide per hour. In electronic correspondence dated April 16, 2021, the Respondent stated that the power outage, which caused the unit upset, was a self-supplied power and distribution system outage; therefore, the incident was deemed preventable. In correspondence dated March 25, 2021, the Respondent stated as a follow-up to the incident, the following actions were taken to prevent reoccurrence: implementation of the upgraded electrical distribution project during the July 2020 turnaround which would have prevented the electrical interruption due to having fast transfer of the high voltage feeds from power, increased automation to isolate the CO2 Unit to prevent venting during loss of water events, and updated emergency procedures and training to isolate the CO2 Unit and restore water to absorbers. The failure to operate within the permit limits set forth in Title V Air Permit No. 2203-V7 is a violation of LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1) and La. R.S. 30:2057(A)(2). The failure to use and maintain air pollution control facilities, any device or contrivance, operating procedure, or abatement scheme used to prevent or reduce air

The Dow Chemical Company

AE-PP-20-00320

Page 3

pollution, whenever emissions are being made which can be controlled by the facility is a violation of LAC 33:III.905.A. The Respondent performed air monitoring at the facility during the release, and the Department performed community fence line air monitoring. All results were non-detect for the presence of ethylene oxide.

- C. The Respondent failed to operate the Flare FS-1 (EQT0687) to ensure opacity and/or opacity emissions are less than twenty (20) percent for more than one (1) six (6) minute period in any sixty (60) consecutive minutes. Specifically, on or about July 3, 2020, through July 4, 2020, the Respondent experienced visible emissions due to flaring (Incident No. T197616 and T197634) from the Light Hydrocarbons III Unit. During the flaring event, there was one (1) incident, 15:13 hours to 15:21 hours, where visible emissions were greater than twenty (20) percent for approximately eight (8) minutes. This is a violation of Specific Requirement 256 of Title V Permit No. 2024-V12, LAC 33:III.1311.C, LAC 33:III.501.C.4, La. R.S. 30:2057(A)(1) and La. R.S. 30:2057(A)(2).
- D. The Respondent failed to identify the hazards of the process in the process hazard analysis (PHA) and failed to ensure that the operating procedures were sufficient to protect against a special or unique hazard. Specifically, on or about November 3, 2019, the Respondent experienced an unauthorized discharge (Incident No. T194105) in the Glycol II Plant. In correspondence dated February 7, 2020, the Respondent stated that at approximately 08:06 hours, drum D-410 ruptured during startup activities at the Glycol II Plant, due to the failure to identify the reactive chemical scenario for acid-catalyzed hydrolysis of ethylene oxide in D-410 in the hazard analysis. In response to low pressure on the acid scrubber, an operator opened the automatic vapor line on D-410 for a few seconds to maintain enough pressure on the scrubber. The high acid level in the scrubber caused backflow of five (5) percent sulfuric acid from the scrubber into the D-410 overhead line. Once the acid and liquid ethylene oxide mixed in D-410, the reaction resulted in the immediate overpressure, which burst the drum and started a fire. The incident resulted in a release of approximately 28.8 pounds of ethylene oxide to the atmosphere from D-410 for approximately seven (7) minutes. Eighteen (18) employees received post-emergency medical screening due to the event, and the event was deemed preventable. The failure to identify, evaluate, and control the hazards of the process, including the hazardous effects of the inadvertent mixing of incompatible materials in the PHA is a violation of 40 CFR 68.67.a and 40 CFR 68.67.c.1, which language has been adopted as a Louisiana regulation in LAC 33:III.5901.A, La. R.S. 30:2057(A)(1), and La. R.S. 30:2057(A)(2). Additionally, the Respondent's Risk Management Plan (RMP) for the facility, Plan Sequence Number 1000092262, listed improper procedures and process design failure as contributing factors to this incident. The failure to ensure that the operating procedures were sufficient to protect against a special or unique hazard such as the potential for acid-catalyzed hydrolysis of ethylene oxide hazard in the D-410 drum is a violation of 40 CFR 68.69.a.3.v, which language has been adopted as a Louisiana regulation in LAC 33:III.5901.A, La. R.S. 30:2057(A)(1) and La. R.S. 30:2057(A)(2). Following the incident, the Respondent reported to have created a structured scenario analysis on the Glycol II ethylene oxide vent handling system and conducted a process safety risk assessment to close any gaps that were identified, as well as propose modifications to the system to prevent future reoccurrence. The RMP notes that operating procedures have been revised and that the process has been changed.

The Dow Chemical Company
 AE-PP-20-00320
 Page 4

E. The Respondent failed to address the hazards of the process in the PHA. Specifically, on or about December 3, 2019, the Respondent experienced an unauthorized discharge (Incident No. T194431) in the Light Hydrocarbon 3 (LHC3) Plant. In correspondence dated December 9, 2019, the Respondent stated that at approximately 09:00 hours, a hole developed on pipe circuit 006-BZCB100-01 while conducting maintenance activities. In correspondence dated March 31, 2021, and April 16, 2021, the Respondent identified the root cause of the incident as corrosion caused by excessive drift coming off of cooling tower CT1000, and noted that the installation of the SS Lok-Rings had created a galvanic corrosion mechanism. Electronic correspondence dated April 16, 2021, stated that the spacing between the cooling tower and process piping was not identified in the LHC3 PHA, but issues with the "drift eliminator" sealing had been identified, and the Respondent was working on a solution. The Respondent provided the most recent inspection report dated December 10, 2018, for the pipe prior to the incident. The December 10, 2018 external visual and ultrasonic thickness inspection report revealed heavy corrosion on the failed piping circuit, and the inspector recommended the Respondent repair and/or replace the section of the corroded piping as needed and paint to arrest corrosion at the next available opportunity or planned outage. The April 22, 2021 electronic correspondence also noted that the failed portion of the piping had been put on a priority list for painting and was being painted when the leak occurred, approximately twelve (12) months after the inspection. Additionally, in electronic correspondence dated April 16, 2021, the Respondent stated the area west of the cooling tower, which was where the failure occurred, will be a priority to implement a Risk-Based Inspection (RBI) program versus the current work process used. Following the incident, the metallurgy of the pipe was not changed, but all SS Lok-Rings on the line were removed and replaced with permanent piping. The incident resulted in a release of approximately 38.8 pounds of 1,3-butadiene, 13.7 pounds of butane, 16.6 pounds of pentane, and 2.7 pounds of propane to the atmosphere from the pipe for approximately forty (40) minutes. The failure to identify, evaluate, and control the hazards of the process in the PHA is a violation of 40 CFR 68.67.c.1, which language has been adopted as a Louisiana regulation in LAC 33:III.5901.A, La. R.S. 30:2057(A)(1), and La. R.S. 30:2057(A)(2).

F. The Respondent reported the following unauthorized releases:

	REPORT (date)	PERMIT NUMBER	EMISSION POINT/UNIT	INCIDENT DATE (duration)	POLLUTANTS RELEASED (RQ)	QUANTITY REPORTED (unit)	REPORTED CAUSE
1.	Unauthorized Discharge Notification Report T200695 (1/19/2021)	3126-V4	Cyclone Vents	1/16/2021 (1 minute)	Ethylene (1,000 lbs)	6,387 lbs	On or about January 16, 2021 at approximately 06:52 hours, the Respondent experienced an unauthorized discharge at the Polyethylene D Plant. Specifically, an emergency vent valve in the reactor system opened, releasing the contents of the reactor to the atmosphere. In correspondence dated January 19, 2021, the Respondent stated that the valve was examined and found to have a bad solenoid and a blown fuse, and noted that the valve's failed electronics caused the premature opening of the valve. In correspondence dated March 31, 2021, the Respondent stated that the root cause of the incident was due to water intrusion into the valve's junction box housing the fuse and solenoid and that the valve's junction box was missing a plug, resulting in the water intrusion. The incident resulted in a release of approximately 6,387 pounds of ethylene to the atmosphere from cyclone vent CY-1350. In correspondence dated January 19, 2021, the Respondent stated that no offsite impact occurred due to the event; the plug was replaced, and four (4) similar valves in the reactor system were inspected to prevent reoccurrence.

The Dow Chemical Company
 AE-PP-20-00320
 Page 5

	REPORT (date)	PERMIT NUMBER	EMISSION POINT/UNIT	INCIDENT DATE (duration)	POLLUTANTS RELEASED (RQ)	QUANTITY REPORTED (unit)	REPORTED CAUSE
2.	Unauthorized Discharge Notification Report T185181 (6/12/2018)	2007-V7	Header Isolation Valve	6/8/2018 (34 minutes)	Chlorine (10 lbs)	414 lbs	On or about June 8, 2018, the Respondent experienced an unauthorized discharge of chlorine. Specifically, at approximately 07:05 hours, during commissioning activities in the Glycol I Plant, operations started introducing chlorine into the chlorine header by opening the header isolation valve when the surrounding gas detectors alarmed. The chlorine header was immediately isolated in response to the alarm. In electronic correspondence dated March 31, 2021, the Respondent stated that the release was caused by an employee not following the facility's use and return to operations policies and procedures, which led to a valve being open during the recommissioning of the chlorine line. The incident resulted in a release of 414 pounds of chlorine from the header isolation valve. Two (2) employees were treated as a precaution due to inhalation from the release, and the release was deemed preventable by the Respondent. Following the incident, the Respondent implemented a new return to use standard/policy; reviewed expectations of Glycol I procedure use policy with all operations personnel with a specific focus on return to operations; and revised and reinforced adequate and consistent facility shift change policy, protocol, and expectations to prevent reoccurrences.
3.	Unauthorized Discharge Notification Report T185705 (7/16/2018)	3126-V3	Cyclone Vents	7/10/2018 (1 minute)	Ethylene (1,000 lbs)	16,973 lbs	On or about July 10, 2018, the Respondent experienced a release of ethylene from the Polyethylene D Plant. In correspondence dated July 16, 2018, the Respondent stated the reactor was overdosed with initiator during a pump swap. This increased the temperature in the reactor, which exceeded the limit to maintain reaction stability. At approximately 16:38 hours, the reactor control system released approximately 16,973 pounds of ethylene to the atmosphere out of the vent cyclones in order to depressurize the reactor and prevent a chemical decomposition as a safety measure. In electronic correspondence dated March 31, 2021, the Respondent stated that the event occurred during the initial start-up of the facility due to an error discovered in the process control code that was corrected.
4.	Unauthorized Discharge Notification Report T185196 (6/15/2018)	3126-V3	Cyclone Vents	6/11/2018 (23 minutes)	Ethylene (1,000 lbs)	18,640 lbs	On or about June 11, 2018, the Respondent experienced a release of ethylene from the Polyethylene D Plant. In correspondence dated June 15, 2018, the Respondent stated that at approximately 07:02 hours, a pump associated with the reactor boiling water system tripped. Specifically, the system backup pump turned on while the system control valve was stabilizing, which caused a pressure spike that exceeded the system rupture disk pressure set point, causing it to open. The loss of boiling water feed to the reactor caused the internal process to destabilize. In electronic correspondence dated June 15, 2021, the Respondent stated that the root cause was the improper coding of the program language, which prevented the reactor from entering a normal shutdown. The incident resulted in a release of approximately 18,640 pounds of ethylene to the atmosphere from the cyclone vent. In order to prevent reoccurrence, the Respondent changed the coding to remove the extend delay timer on the shutdown code and operating procedures were changed to give the operators guidance and training on shutdown scenarios.

Each failure to use and maintain air pollution control facilities, any device or contrivance, operating procedure, or abatement scheme used to prevent or reduce air pollution, whenever emissions are being made which can be controlled by the facility is a violation of LAC 33:III.905.A, and La. R.S. 30:2057(A)(1) and La. R.S. 30:2057(A)(2).

The Dow Chemical Company
 AE-PP-20-00320
 Page 6

G. The Respondent failed to accurately report the incident root cause and whether or not the discharge was preventable or not preventable in the unauthorized discharge report. The Respondent stated that Incident No. T200695 which occurred on January 16, 2021, was not preventable; however, the supplemental information provided in electronic correspondence dated March 31, 2021, referenced in paragraph F.1, indicates the incident was preventable. Additionally, in the Unauthorized Discharge Notification Report dated January 19, 2021, the Respondent stated the root cause of the incident was the failure of an emergency vent valve in the reactor system which was due to a bad solenoid and blow fuse on the valve. However, in electronic correspondence dated March 31, 2021, the Respondent stated the root cause of the incident was due to water intrusion into the valve's junction box housing the fuse and solenoid. Reportedly, the valve's junction box was missing a plug leading to the water intrusion. The failure to accurately report the root cause of the incident and whether or not the release was preventable or not preventable is a violation of LAC 33:I.3925.B.14 and La. R.S. 30:2057(A)(2).

H. The Respondent failed to submit updates every sixty (60) days about the status of the ongoing investigation of the following unauthorized discharges until the investigation was completed and the results of investigation were submitted.

	INCIDENT NUMBER (date)	PERMIT NO.	DESCRIPTION
1.	T194431 (12/3/2019)	2024-V12	According to the release notification reports dated December 9, 2019, December 11, 2019, December 17, 2019, and February 17, 2020, the Respondent reported that the incident investigation was on-going for the release that occurred on December 3, 2019. According to the incident follow-up report dated April 6, 2021, the Respondent reported the completion of the incident investigation.
2.	T186855 (9/7/2018)	2255-V7	According to the release notification reports dated September 13, 2018, the Respondent reported that the incident investigation was on-going for the release that occurred on September 7, 2018. According to the incident follow-up report dated April 6, 2021, the Respondent reported the completion of the incident investigation.
3.	T185181 (6/8/2018)	2007-V7	According to the release notification reports dated June 12, 2018, the Respondent reported that the incident investigation was on-going for the release that occurred on June 8, 2018. According to the incident follow-up report dated April 6, 2021, the Respondent reported the completion of the incident investigation.

Each failure to submit updates every sixty (60) days about the status of the ongoing investigation of the unauthorized discharge until the investigation has been completed and the results of investigation have been submitted is a violation of LAC 33:I.3925.A.3 and La. R.S. 30:2057(A)(2).

Pursuant to La. R.S. 30:2050.3(B), you are hereby notified that the issuance of a penalty assessment is being considered for the violation(s) described herein. Written comments may be filed regarding the violation(s) and the contemplated penalty. If you elect to submit comments, it is requested that they be submitted within ten (10) days of receipt of this notice.

Prior to the issuance of any additional appropriate enforcement action, you may request a meeting with the Department to present any mitigating circumstances concerning the violation(s). If you would like to have such a meeting, please contact Madison Kirkland at 225-219-3165 or Madison.Kirkland@la.gov within ten (10) days of receipt of this **NOTICE OF POTENTIAL PENALTY**.

The Dow Chemical Company
AE-PP-20-00320
Page 7

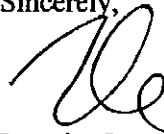
The Department is required by La. R.S. 30:2025(E)(3)(a) to consider the gross revenues of the Respondent and the monetary benefits of noncompliance in order to determine whether a penalty will be assessed and the amount of such penalty. Please forward the Respondent's most current annual gross revenue statement along with a statement of the monetary benefits of noncompliance for the cited violations to the above named contact person within ten (10) days of receipt of this **NOTICE OF POTENTIAL PENALTY**. Include with your statement of monetary benefits the method(s) you utilized to arrive at the sum. If you assert that no monetary benefits have been gained, you are to fully justify this statement. If the Respondent chooses not to submit the requested most current annual gross revenues statement within ten (10) days, it will be viewed by the Department as an admission that the Respondent has the ability to pay the statutory maximum penalty as outlined in La. R.S. 30:2025.

For each violation described herein, the Department reserves the right to seek civil penalties and the right to seek compliance with its rules and regulations in any manner allowed by law, and nothing herein shall be construed to preclude the right to seek such penalties and compliance.

The Department assesses civil penalties based on LAC 33:I.Subpart1.Chapter 7. To expedite closure of this **NOTICE OF POTENTIAL PENALTY**, the Respondent may offer a settlement amount to resolve any claim for civil penalties for the violation(s) described herein. The Respondent may offer a settlement amount, but the Department is under no obligation to enter into settlement negotiations. The decision to proceed with a settlement is at the discretion of the Department. The settlement offer amount may be entered on the attached "**NOTICE OF POTENTIAL PENALTY REQUEST TO SETTLE**" form. The Respondent must include a justification of the offer. **DO NOT** submit payment of the offer amount with the form. The Department will review the settlement offer and notify the Respondent as to whether the offer is or is not accepted.

To reduce document handling, please refer to the Enforcement Tracking Number and Agency Interest Number on the front of this document on all correspondence in response to this action.

Sincerely,



Lourdes Iturralde
Assistant Secretary
Office of Environmental Compliance

LI/MLK/mlk
Alt ID No. 1280-00008

c: The Dow Chemical Company
c/o Ms. Zenille Saunders
P.O. Box 150
Plaquemine, LA 70765



LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE
ENFORCEMENT DIVISION
POST OFFICE BOX 4312
BATON ROUGE, LOUISIANA 70821-4312

NOTICE OF POTENTIAL PENALTY
REQUEST TO SETTLE (OPTIONAL)

Enforcement Tracking No.	AE-PP-20-00320	Contact Name	Madison Kirkland
Agency Interest (AI) No.	1409	Contact Phone No.	225-219-3165
Alternate ID No.	1280-00008	Contact Email	Madison.Kirkland@la.gov
Respondent:	The Dow Chemical Company	Facility Name:	Louisiana Operations – Glycol II Plant
	c/o C T Corporation System	Physical Location:	21255 Louisiana Highway 1
	Agent for Service of Process		
	3867 Plaza Tower Drive	City, State, Zip:	Plaquemine, LA 70765
	Baton Rouge, LA 70816	Parish:	Iberville Parish

SETTLEMENT OFFER (OPTIONAL)

(check the applicable option)

_____	The Respondent is not interested in entering into settlement negotiations with the Department with the understanding that the Department has the right to assess civil penalties based on LAC 33:1.Subpart1.Chapter7.
_____	In order to resolve any claim for civil penalties for the violations in NOTICE OF POTENTIAL PENALTY (AE-PP-20-00320), the Respondent is interested in entering into settlement negotiations with the Department and would like to set up a meeting to discuss settlement procedures.
_____	In order to resolve any claim for civil penalties for the violations in NOTICE OF POTENTIAL PENALTY (AE-PP-20-00320), the Respondent is interested in entering into settlement negotiations with the Department and offers to pay \$ _____ which shall include LDEQ enforcement costs and any monetary benefit of non-compliance. <ul style="list-style-type: none"> • Monetary component = \$ _____ • Beneficial Environmental Project (BEP) component (optional)= \$ _____ <p>• DO NOT SUBMIT PAYMENT OF THE OFFER WITH THIS FORM- the Department will review the settlement offer and notify the Respondent as to whether the offer is or is not accepted.</p>
	The Respondent has reviewed the violations noted in NOTICE OF POTENTIAL PENALTY (AE-PP-20-00320) and has attached a justification of its offer and a description of any BEPs if included in settlement offer.

CERTIFICATION STATEMENT

I certify, under provisions in Louisiana and United States law that provide criminal penalties for false statements, that based on information and belief formed after reasonable inquiry, the statements and information attached and the compliance statement above, are true, accurate, and complete. I also certify that I do not owe outstanding fees or penalties to the Department for this facility or any other facility I own or operate. I further certify that I am either the Respondent or an authorized representative of the Respondent.

Respondent's Signature	Respondent's Printed Name	Respondent's Title
Respondent's Physical Address	Respondent's Phone #	Date

MAIL COMPLETED DOCUMENT TO THE ADDRESS BELOW:

Louisiana Department of Environmental Quality
 Office of Environmental Compliance
 Enforcement Division
 P.O. Box 4312
 Baton Rouge, LA 70821
 Attn: Madison Kirkland