From: Schneider, Mary Jo (M)

To: <u>EGLE-ROP</u>

Cc: Hare, Chris (EGLE); Owens, Caryn (EGLE); Dole, Jamie (J); Alger, Jim (J); Schneider, Mary Jo (M)

Subject: Electronic Submittal: DOW SILICONES CORPORATION RULE 216(2) CHANGE NOTIFICATION: EU604-08

Date:Tuesday, August 22, 2023 8:25:25 AMAttachments:EU604-08 Cover Letter Minor Mod.pdfEU604-08 DSC C-001 Form.pdf

EU604-08 DSC AI-001 Form.pdf EU604-08 DSC M-001 Form.pdf EU604-08 VOC CAM Plan 2023-0811.pdf

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Attached is the EU604-08 Cover Letter Minor Mod, the EU604-08 DSC C-001 Form, both signed by Kristan Soto, the EU604-08 DSC Al-001 Form, the EU604-08 DSC M-001 Form and the EU604-08 VOC CAM Plan 2023-0811 to serve as Dow's electronic submittal.

Kind regards,

MaryJo

Mary Jo Schneider Dow Michigan Operations Administration 1790 Building, Office 207.1 Ph: (989) 636-3015 mschneider@dow.com

General Business



August 22, 2023

Michigan Department of EGLE Air Quality Division Grand Rapids District Office 350 Ottawa Avenue NW, Unit 10 Grand Rapids, MI 49503 EGLE-ROP@michigan.gov

cc: Chris Hare; MI Dept. of EGLE; Air Quality Division; Saginaw Bay District Office; 401 Ketchum Street Suite B; Bay City, MI 48708; harec@michigan.gov Caryn Owens; MI Dept. of EGLE; Air Quality Division; Cadillac District Office; 120 West Chapin Street; Cadillac, MI 49601-2158; owensc1@michigan.gov

DOW SILICONES CORPORATION RULE 216(2) CHANGE NOTIFICATION: EU604-08

Please find attached the notification forms required by Rule 216(2) for changes to Dow Silicones Corporation Renewable Operating Permit number MI-ROP-A4043-2019b.

On July 31, 2023, the process equipment associated with the fluorocyclics process (EU604-08) received special conditions associated with permit to install application no. 466-73F. Dow Silicones Corporation requests that these special conditions be included in the renewable operating permit.

Attached are the M-001, C-001, AI-001 forms and a copy of the CAM Plan. If you have questions regarding this submittal, please contact Jim Alger at (989) 615-1901.

Kristan Soto Responsible Care Leader 1790 Building, Washington Street Midland, MI 48674

Listan Soto

(989) 633-1809

Enclosures

EGLE

Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division

RENEWABLE OPERATING PERMIT APPLICATION C-001: CERTIFICATION

This information is required by Article II, Chapter 1, part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to provide this information may result in civil and/or criminal penalties. Please type or print clearly.

This form is completed and included as part of Renewable Operating Permit (ROP) initial and renewal applications, notifications of change, amendments, modifications, and additional information.

Stationary Source Name Dow Silicones Corporation				· · · · · · · · · · · · · · · · · · ·	
•					
City			County		
Midland			Midland		
SUBMITTAL CERTIFICA		ON			
1. Type of Submittal Chec	-				
☐ Initial Application (Rule 2	10)	Notification / Admini	istrative Amendment / M	Modification (Rules 215/216)	
Renewal (Rule 210)		Other, describe on A	AI-001		
2. If this ROP has more tha	ın one Section, list th	ne Section(s) that this	Certification applies to		
3. Submittal Media	☑ E-mail	☐ FTP	☐ Disk		
 Operator's Additional Info on Al-001 regarding a su EU604-08 	ormation ID - Create bmittal.	an Additional Informa	ation (AI) ID that is used	d to provide supplemental information	
CONTACT INFORMATION	<u> </u>				
Contact Name			Title	· · · · · · · · · · · · · · · · · · ·	
lim Alger			Air Specialist		
Phone number		E-mail address	E-mail address		
989-615-1901		james.s.alger@	james.s.alger@dow.com		
This form must be sig	ned and dated b	y a Responsible	official.		
Responsible Official Name			Title	,	
Kristan Soto			EH&S Responsible	Care Leader	
Aailing address 790 Building, Washington Sti	reet				
City	State	ZIP Code	County	Country	
/lidland	Мі	48674	Midland	USA	
As a Responsible Offi inquiry, the statements	icial, I certify the sand information	at, based on in on in this submit	formation and be ttal are true, accur	lief formed after reasonable rate and complete.	
• .					



Michigan Department of Environment, Great Lakes, and Energy Air Quality Division

RENEWABLE OPERATING PERMIT M-001: RULE 215 CHANGE NOTIFICATION RULE 216 AMENDMENT/MODIFICATION APPLICATION

This information is required by Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment.

	122			<u> </u>		
1. SRN A4043	2. ROP Number	MI-ROP-A4043-2019b	3. County	Midland		
4. Stationary Source Name 1	Dow Silicones Corpo	oration				
5. Location Address	3901 S. Saginaw Ro	pad	6. City	Midland		
7. Submittal Type - The submit up of the affected ROP page	es for applications fo	or Rule 216 changes.	ed below. Check o	nly one box.	Attach	a mark-
Rule 215(2) Notification of		e Items 8 – 10 and 14				
Rule 215(3) Notification of		e Items 8 – 11 and 14				
Rule 215(5) Notification of						
☐ Rule 216(1)(a)(i)-(iv) Adm	1.77) and 14			
Rule 216(1)(a)(v) Adminis	trative Amendment.	•		nitoring & rec	ordkeepi	ng must
Rule 216(2) Minor Modific	cation. Complete	e Items 8 – 12 and 14				
Rule 216(3) Significant M		o Items 8 – 12 and 14, and ion forms. See detailed ins		al information	needed	on ROP
Rule 216(4) State-Only Mo	odification. Complete	Items 8 – 12 and 14				
Effective date of the change See detailed instructions.	. (MM/DD/YYYY)	08/31/2023	9. Change in emis	ssions?] Yes	□ No
10. Description of Change - De pollutants that will occur. If	escribe any changes additional space is	or additions to the ROF needed, complete an Ac	P, including any cha dditional Informatio	anges in emi n form (Al-0	issions a 01).	and/or
On July 31, 2023 the proce conditions associated with page special conditions be included	permit to install appl	ication no. 466-73F. Do	ics process (EU604 w Silicones Corpo	4-08) receive ration reque	ed speci sts that	ial these
11. New Source Review Permi	it(s) to Install (PTI) a	ssociated with this appli	cation?	⊠ Ye	es 🗌	No
If Yes, enter the PTI Number	er(s) <u>466-73F</u>					
12. Compliance Status - A nam Al-001 if any of the following		an, including a schedule	for compliance, m	ust be subn	nitted us	ing an
a. Is the change identified a	above in compliance	with the associated app	plicable requireme	nt(s)? ⊠	Yes	☐ No
b. Will the change identified requirement(s)?	d above continue to	be in compliance with the	ne associated appli	cable	Yes	□ No
c. If the change includes a	future applicable re-	quirement(s), will timely	compliance be ach	ieved?	Yes	☐ No
13. Operator's Additional Inform Al-001 form used to provide			(AI) ID for the asse	ociated A	I EU604	1-08
14. Contact Name	Telephone	No.	E-mail Address			
Jim Alger	(989) 615-	 -	james.s.alger@do	w.com		
15. This submittal also updates (If yes, a mark-up of the at				_ [] Yes	⊠ N/A

NOTE: A CERTIFICATION FORM (C-001) SIGNED BY A RESPONSIBLE OFFICIAL MUST ACCOMPANY ALL SUBMITTALS
For Assistance

Contact: 800-862-9278

EGLE

RENEWABLE OPERATING PERMIT APPLICATION AI-001: ADDITIONAL INFORMATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

	SRN: A4043	Section Number (if applicable):
1. Additional Information ID AI-EU604-08		
Additional Information	<u> </u>	
2. Is This Information Confidential?		☐ Yes ⊠ No
EU604-08 is subject to CAM (40 CFR Part 64) for VOC the application.	s. Therefore, the foll	lowing CAM plan is being submitted as part of
Please refer to the attached CAM plan.		
		Page of

For Assistance Contact: 800-662-9278

I. BACKGROUND

A. Emission Unit

Description: Production, storage, and transfer of Fluoro cyclics process.

Identification: EU604-08

Facility: Dow Silicones Corporation

3901 S. Saginaw Rd Midland, MI 48686

B. Applicable Regulation, Emission Limit, Monitoring Requirements

Permit Number: 466-73E

Emission Limits:

VOC: 10.6 lb/hr, R 336.1702(a) 8.68 tons/yr, R 336.1702(a)

Monitoring Requirements:

• 7791 Condenser while offloading railcar

• 22713 Condenser service water return temperature

• 22737 Condenser service water return temperature

C. Control Technology

Condenser HX-7791

Condenser HX-22713

Condenser HX-22737

II. MONITORING APPROACH

		HX-7791 Condenser Outlet Temperature
Α.	Indicator	Condenser Outlet Temperature.
В.	Indicator Range	An excursion is defined as operation of railcar unloading without condenser 7791 outlet temperature being less than 40.6°F.
C.	QIP Threshold	None selected
D.	Control Bypass	None present

		HX-22713 Service Water Return Temperature
E.	Indicator	Condenser service water return temperature
F.	Indicator Range	An excursion is defined as operation of the EU604-08 process with condenser 22713 service water return temperature being greater than 105°F.
G.	QIP Threshold	None selected
H.	Control Bypass	None present

		HX-22737 Service Water Return Temperature
I.	Indicator	Condenser service water return temperature
J.	Indicator Range	An excursion is defined as operation of the EU604-08 process with condenser 22737 service water return temperature being greater than 75°F.
K.	QIP Threshold	None selected
L.	Control Bypass	None present

PERFORMANCE CRITERIA

		HX-7791 Condenser Outlet Temperature
М.	Data Representativeness	Condenser outlet temperature is continuously tracking during railcar unloading operation.
N.	Verification of Operational Status	NA
О.	QA/QC Practices and Criteria	The condenser is on a regular PM schedule.
Р.	Monitoring Frequency	Condenser outlet temperature is continuously tracking during railcar unloading operation.
Q.	Data Collection Procedure	Condenser outlet temperature is recorded at least once every 15-minutes during railcar unloading operation.
R.	Averaging Period	15-minute

		HX-22713 Service Water Return Temperature
S.	Data Representativeness	Condenser service water return temperature is continuously tracked during emission unit operation.
Т.	Verification of Operational Status	NA
U.	QA/QC Practices and Criteria	The condenser is on a regular PM schedule.
V.	Monitoring Frequency	Condenser service water return temperature is continuously tracked during emission unit operation.
W.	Data Collection Procedure	Condenser service water return temperature is recorded at least once every 15-minutes during emission unit operation.
Χ.	Averaging Period	15-minute

		HX-22737 Service Water Return Temperature
Υ.	Data Representativeness	Condenser service water return temperature is continuously tracked during emission unit operation.
Z.	Verification of Operational Status	NA
AA.	QA/QC Practices and Criteria	The condenser is on a regular PM schedule.
BB.	Monitoring Frequency	Condenser service water return temperature is continuously tracked during emission unit operation.
CC.	Data Collection Procedure	Condenser service water return temperature is recorded at least once every 15-minutes during emission unit operation.
DD.	Averaging Period	15-minute

III. JUSTIFICATION

A. Rationale for Selection of Performance Indicators

Monitoring condenser outlet temperature ensures proper operation and control efficiency is being achieved by the condenser. An increase in condenser outlet temperature can indicate that the condenser will not achieve the desired level of control and that corrective actions should be implemented.

Monitoring service water return temperature ensures proper operation and control efficiency is being achieved by the condensers. An increase in service water return temperature can indicate that the condensers will not achieve the desired level of control and that corrective actions should be implemented.

B. Rationale for Selection of Indicator Ranges

The indicator range for the condenser outlet temperature is set based on the worst-case temperature used for emission calculations. No QIP threshold has been selected for this indicator.

The indicator ranges for the service water return temperature are set based on the worst-case temperatures used for emission calculations. No QIP threshold has been selected for this indicator.