



November 16, 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; Owenscl@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 November 14, 2023, the process equipment associated with the fluorocyclics process (EU604-08) received special conditions associated with permit to install application no. 466-73G. Dow Silicones Corporation requests that these special conditions be included in the renewable operating permit.

Please note that in August 2023, Dow Silicones Corporation (DSC) submitted ROP minor modification application no. 202300127 to roll air permit to install no. 466-73F into the ROP. To date, the ROP has not been modified to include this permit. Therefore, DSC requests that ROP minor modification application no. 202300127 and its associated permit be void upon the effective date stated in the attached M-001 form for PTI no. 466-73G.

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.

A handwritten signature in black ink that reads "Kristan Soto".

Kristan Soto
Responsible Care Leader
1790 Building, Washington Street
Midland, MI 48674
(989) 633-1809

Enclosures



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.

Form Type C-001	SRN A4043
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Stationary Source Name Dow Silicones Corporation	
City Midland	County Midland

SUBMITTAL CERTIFICATION INFORMATION	
1. Type of Submittal <i>Check only one box.</i>	
<input type="checkbox"/> Initial Application (Rule 210)	<input checked="" type="checkbox"/> Notification / Administrative Amendment / Modification (Rules 215/216)
<input type="checkbox"/> Renewal (Rule 210)	<input type="checkbox"/> Other, describe on AI-001
2. If this ROP has more than one Section, list the Section(s) that this Certification applies to _____	
3. Submittal Media <input checked="" type="checkbox"/> E-mail <input type="checkbox"/> FTP <input type="checkbox"/> Disk <input checked="" type="checkbox"/> Paper	
4. Operator's Additional Information ID - Create an Additional Information (AI) ID that is used to provide supplemental information on AI-001 regarding a submittal. AI EU604-08	

CONTACT INFORMATION	
Contact Name Jim Alger	Title Air Specialist
Phone number 989-615-1901	E-mail address james.s.alger@dow.com

This form must be signed and dated by a Responsible Official.				
Responsible Official Name Kristan Soto			Title EH&S Responsible Care Leader	
Mailing address 1790 Building, Washington Street				
City Midland	State MI	ZIP Code 48674	County Midland	Country USA
As a Responsible Official, I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this submittal are true, accurate and complete.				
 _____ Signature of Responsible Official			 _____ Date	

**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.

1. SRN A4043	2. ROP Number MI-ROP-A4043-2019b	3. County Midland
4. Stationary Source Name Dow Silicones Corporation		
5. Location Address 3901 S. Saginaw Road		6. City Midland
<p>7. Submittal Type - <i>The submittal must meet the criteria for the box checked below. Check only one box. Attach a mark-up of the affected ROP pages for applications for Rule 216 changes.</i></p> <p><input type="checkbox"/> Rule 215(1) Notification of change. Complete Items 8 – 10 and 14</p> <p><input type="checkbox"/> Rule 215(2) Notification of change. Complete Items 8 – 10 and 14</p> <p><input type="checkbox"/> Rule 215(3) Notification of change. Complete Items 8 – 11 and 14</p> <p><input type="checkbox"/> Rule 215(5) Notification of change. Complete Items 8 – 10 and 14</p> <p><input type="checkbox"/> Rule 216(1)(a)(i)-(iv) Administrative Amendment. Complete Items 8 – 10 and 14</p> <p><input type="checkbox"/> Rule 216(1)(a)(v) Administrative Amendment. Complete Items 8 – 14. Results of testing, monitoring & recordkeeping must be submitted. See detailed instructions.</p> <p><input checked="" type="checkbox"/> Rule 216(2) Minor Modification. Complete Items 8 – 12 and 14</p> <p><input type="checkbox"/> Rule 216(3) Significant Modification. Complete Items 8 – 12 and 14, and provide any additional information needed on ROP application forms. See detailed instructions.</p> <p><input type="checkbox"/> Rule 216(4) State-Only Modification. Complete Items 8 – 12 and 14</p>		
8. Effective date of the change. (MM/DD/YYYY) <i>See detailed instructions.</i> 11/17/2023		9. Change in emissions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>10. Description of Change - <i>Describe any changes or additions to the ROP, including any changes in emissions and/or pollutants that will occur. If additional space is needed, complete an Additional Information form (AI-001).</i></p> <p>On November 14, 2023 the process equipment associated with the fluorocyclics process (EU604-08) received special conditions associated with permit to install application no. 466-73G. Dow Silicones Corporation requests that these special conditions be included in the renewable operating permit.</p>		
11. New Source Review Permit(s) to Install (PTI) associated with this application? If Yes, enter the PTI Number(s) 466-73G - - - - -		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>12. Compliance Status - <i>A narrative compliance plan, including a schedule for compliance, must be submitted using an AI-001 if any of the following are checked No.</i></p> <p>a. Is the change identified above in compliance with the associated applicable requirement(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>b. Will the change identified above continue to be in compliance with the associated applicable requirement(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>c. If the change includes a future applicable requirement(s), will timely compliance be achieved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>		
13. Operator's Additional Information ID - <i>Create an Additional Information (AI) ID for the associated AI-001 form used to provide supplemental information.</i>		AI EU604-08
14. Contact Name Jim Alger	Telephone No. (989) 615-1901	E-mail Address james.s.alger@dow.com
15. This submittal also updates the ROP renewal application submitted on ___/___/___ <i>(If yes, a mark-up of the affected pages of the ROP must be attached.)</i>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A

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

For Assistance
Contact: 800-862-9278

www.michigan.gov/egle

EQP 5775 (Rev.04-2019)



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

2. Is This Information Confidential?

 Yes No

EU604-08 is subject to CAM (40 CFR Part 64) for VOCs. Therefore, the following CAM plan is being submitted as part of the application.

Please refer to the attached CAM plan.

Page of

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: 466-73G

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	
A. Indicator	Condenser Outlet Temperature.
B. 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 167°F (75°C).
K. QIP Threshold	None selected
L. Control Bypass	None present

PERFORMANCE CRITERIA

HX-7791 Condenser Outlet Temperature	
M. Data Representativeness	Condenser outlet temperature is continuously tracking during railcar unloading operation.
N. Verification of Operational Status	NA
O. QA/QC Practices and Criteria	The condenser is on a regular PM schedule.
P. 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.
T.	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.
X.	Averaging Period	15-minute

		HX-22737 Service Water Return Temperature
Y.	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.