

**Via Electronic Mail**

December 21, 2022

Mr. Robert Byrnes  
EGLE-Air Quality Division  
BYRNESR@michigan.gov

**RE: FCA US LLC—Jefferson North Assembly Plant (SRN N2155)  
Supplement to the December 5, 2022 VN Response**

Mr. Byrnes:

This letter provides supplemental information to our December 5, 2022 response to AQD's November 14, 2022 Violation Notice ("VN") alleging noncompliance with the 4.8 lbs/job permit condition for volatile organic compound ("VOC") emissions at the Jefferson North Assembly Plant ("JNAP"). This supplemental information documents what was previously provided to EGLE during our December 14<sup>th</sup> follow-up conference call.

As we discussed, FCA continues to believe that the start-up/shutdown and abnormal conditions described in the VN response are the primary drivers for the compliance concern, e.g., given the unusually low production and ton/year emissions from JNAP. That said, FCA is pursuing multiple avenues to address and lower VOC emissions from the facility. In particular, FCA is working to minimize the negative impact that the recent vehicle launch and low production rate has had on the per unit VOC emissions rate. Expanding on what appeared in the VN response letter, FCA provides additional detail on the following strategies:

**1. Booth Performance and Spray Equipment Performance**

Transfer Efficiency ("TE") and Oven Solvent Loading ("OSL") represent how the coating process functions relative to (1) how much paint is required to be sprayed per unit, (2) how efficiently the paint is applied to the vehicle, and (3) what portion of the VOCs in the paint are released in the oven and controlled by the abatement system.

To optimize booth and spray equipment performance as well as minimize VOC emissions, FCA has taken the following steps:

- a. Optimized the paint spraying process to minimize paint usage per unit. This is a key activity during a launch process to ensure that the overspray is kept to a minimum while maintaining the appropriate paint film thickness on the vehicle.
- b. Verified proper booth balance to ensure that emissions are captured in the appropriate zone without carryover to uncontrolled zones.
- c. Cleaned and maintained the individual zones and ventilation systems to ensure proper operation.

**2. Reduction of Solvent Use and Emissions**

Solvent usage, on a per unit basis, becomes a more significant factor at low production rates. Solvent is used to purge the coating equipment as well as for general booth cleaning. Consistent production at higher volumes will reduce the relative impact of solvent-based

VOC emissions, but FCA is also looking for sustainable improvements on a per unit basis, independent of production fluctuations.

To minimize VOC emissions from solvent usage, FCA has taken the following steps:

- a. During low production periods, FCA will only use two of the three paint lines to reduce additional purge solvent required when there are excess gaps between units.
- b. Increasing the painting block size (units of the same color) to avoid the need to purge the painting equipment between each unit painted.
- c. Maintain and improve the purge solvent recovery system to capture as much purge as possible for recycling and recovery.
- d. Reprogramming the system logic to limit purge cycles to a time-based frequency using readers from one zone to another.
- e. Replace current VOC based equipment cleaner with a lower-VOC cleaner for general booth cleaning.

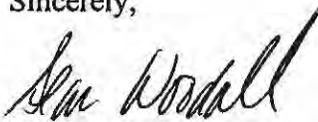
### 3. General Improvements

FCA is also looking at additional strategies to complete the vehicle model transition while also managing the unavoidable impacts of supply chain disruptions. FCA is evaluating other potential methods which, while not specifically focused on VOC emissions, can have a positive impact on reducing emissions. These include:

- a. Evaluate the basis for purge emissions calculation to more accurately determine the amount of solvent which was emitted versus the amount in the process equipment at any time and the amount recovered.
- b. Evaluating operations to help reduce the need for full body reprocess, which can help reduce paint sprayed per unit and the corresponding VOC emissions.

As indicated in FCA's December 5 response letter, FCA continues to focus on these activities to minimize VOC emissions and bring the plant emissions rate back into compliance as quickly as possible. Our intention is to conduct Transfer Efficiency and Oven Solvent Loading testing at the plant in early February 2023, which will help to realize these improvements in our future emissions calculations. If you have any questions or concerns, however, please call or e-mail Matt Read (at 248-385-8093 or [matthew.read@stellantis.com](mailto:matthew.read@stellantis.com)).

Sincerely,



Sean Woodall  
JNAP Plant Manager

C: Mr. Chris Ethridge, AQD  
Dr. April Wendling, AQD  
Ms. Jenine Camilleri, AQD  
Mr. Donald McCulla, JNAP-EHS  
Mr. Steven Szura, JNAP-EHS  
Mr. Stephen Perrott, EHS Assembly Division Lead

Ms. Sandra Walker, FCA Corporate EHS  
Mr. Al Johnston, FCA Corporate EHS  
Mr. Chris Pearson, FCA Corporate EHS  
Mr. Matt Read, FCA OGC  
Mr. Kurt Kissling, Warner Norcross + Judd LLP

# EGLE

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY  
AIR QUALITY DIVISION

## RENEWABLE OPERATING PERMIT REPORT CERTIFICATION

Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal penalties.

Reports submitted pursuant to R 336.1213 (Rule 213), subrules (3)(c) and/or (4)(c), of Michigan's Renewable Operating Permit (ROP) program must be certified by a responsible official. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as specified in Rule 213(3)(b)(ii), and be made available to the Department of Environment, Great Lakes, and Energy, Air Quality Division upon request.

Source Name FCA US- LLC- Jefferson North Assembly Plant County Wayne  
Source Address 2101 Conner Avenue City Detroit  
AQD Source ID (SRN) N2155 ROP No. MI-ROP-N2155-2017 ROP Section No. \_\_\_\_\_

Please check the appropriate box(es):

**Annual Compliance Certification (Pursuant to Rule 213(4)(c))**

Reporting period (provide inclusive dates): From \_\_\_\_\_ To \_\_\_\_\_

1. During the entire reporting period, this source was in compliance with **ALL** terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the ROP.
2. During the entire reporting period this source was in compliance with all terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference, **EXCEPT** for the deviations identified on the enclosed deviation report(s). The method used to determine compliance for each term and condition is the method specified in the ROP, unless otherwise indicated and described on the enclosed deviation report(s).

**Semi-Annual (or More Frequent) Report Certification (Pursuant to Rule 213(3)(c))**

Reporting period (provide inclusive dates): From \_\_\_\_\_ To \_\_\_\_\_

1. During the entire reporting period, **ALL** monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred.
2. During the entire reporting period, all monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred, **EXCEPT** for the deviations identified on the enclosed deviation report(s).

**Other Report Certification**

Reporting period (provide inclusive dates): From NA To NA  
Additional monitoring reports or other applicable documents required by the ROP are attached as described:

Jefferson North Assembly Plant Rule 912 report requested Addendum.

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this report and the supporting enclosures are true, accurate and complete

Mr. Sean Woodall Plant Manager (313 956-8244)  
Name of Responsible Official (print or type) Title Phone Number  
Sean Woodall Signature of Responsible Official 12/20/2022 Date