



October 7, 2022

Ms. Kerry Kelly Senior Environmental Quality Analyst MI EGLE – Air Quality Division Warren District Office 27700 Donald Court Warren, MI 48092



Re: Violation Notice dated September 19, 2022, General Motors LLC - Milford Proving Ground (A5262)

Dear Ms. Kelly,

This letter serves as General Motors LLC – Milford Proving Ground's (GM-MPG) response to the Violation Notice dated September 19, 2022. According to the Violation Notice:

"Record provided for the inspection indicate GM-MPG did not calculate ethylene glycol emissions using a mass balance approach and emission factors as approved by the AQD District Supervisor. Specifically, the AQD District Supervisor does not approve of GM-MPG's current method of calculating ethylene glycol emissions because it results in negative monthly and 12-month rolling ethylene glycol emissions."

## Dates the violation occurred:

From November 2018 thru August 2022, GM-MPG utilized a mass balance approach to record 12-month rolling HAP emissions from ethylene glycol. A review of the records without utilizing a mass balance approach indicated GM-MPG did not exceed any HAP emission limit related to ethylene glycol during this time.

## Explanation of the cause and duration of the violation:

As stated in Section B.VI.3.d of the Source Wide Conditions of ROP MI-ROP-A5262-2021 and previously in MI-ROP-A5262-2016:

"Individual and aggregate HAP emission calculations using a mass balance approach and emission factors as approved by the AQD District Supervisor for determining the monthly emission rate in tons per calendar month."

GM-MPG interpreted this as saying the AQD District Supervisor has approved mass balance calculations. During the time stated above, GM-MPG utilized a simple mass balance approach to calculate potential emissions from ethylene glycol wherein, purchases (incoming material) minus waste shipment (outgoing material) resulted in material left onsite (potential emissions). This was seen as a conservative estimate as ethylene glycol is almost exclusively used in closed systems, that do not directly emit to the environment.

Since very little ethylene glycol is lost as emissions, nearly all the material is captured and eventually shipped offsite. This caused some months, and some 12-month rolling totals to be recorded as negative. The amount left onsite (potential emissions) should be close to zero.

## Whether the Violation is Ongoing:

GM-MPG, as of September 1, has stopped utilizing a mass balance approach for ethylene glycol.

A summary of the actions that have been taken and are proposed to be taken to correct the violation and the dates by which these actions will take place, and what steps are being taken to prevent a reoccurrence:

Starting September 1, 2022, only incoming material will be recorded until an emission factor or mass balance approach can be agreed upon by both GM-MPG and MI-EGLE. Additionally, after a thorough review of ethylene glycol usage at GM-MPG, it was determined that most of the emissions recorded from ethylene glycol usage is from coolant systems of motor vehicles. The GM-MPG ROP (MI-ROP-A5262-2021) specifically applies to:

"The source-wide conditions cover all boilers, heaters, and other combustion equipment including emergency generators. includes all process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment."

Use, service, and maintenance of motor vehicles are considered insignificant activities at Stationary Sources per Rule 212 (2)(j). GM-MPG realizes it has over reported HAP (ethylene glycol) emissions and will correct it going forward.

If you have any questions regarding the above, please contact Corri Zilio at (248) 308-6473 or corri.zilio@gm.com.

Sincerely,
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Erica Fultz

Operations Group Manager

General Motors - Milford Proving Ground

cc: Jenine Camilleri - EGLE Enforcement Unit Supervisor