



Shell Chemical Appalachia LLC
300 Frankfort Rd
Monaca, PA 15061

October 29, 2023

Mark Gorog P.E., Regional Manager Air Quality Program
Pennsylvania Department of Environmental Protection (PADEP)
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222

RE: PA-04-00740C Ethylene Manufacturing Line (Source ID 201), HP Ground Flares (Source IDs C205A and C205B), and HP Elevated Flare (Source ID C205C) Visible and Excess Emissions Malfunction *Follow Up* Report

Dear Mr. Gorog,

Shell Chemical Appalachia LLC (“Shell”) is submitting this malfunction *follow up* report to the Pennsylvania Department of Environmental Protection (PADEP) to provide a status update of the outstanding corrective action documented in “RE: PA-04-00740C Ethylene Manufacturing Line (Source ID 201), HP Ground Flares (Source IDs C205A and C205B), and HP Elevated Flare (Source ID C205C) Visible and Excess Emissions Malfunction Report” submitted on August 9, 2023.

- **Name and location of the facility**

Shell Polymers Monaca
300 Frankfort Road, Monaca PA, 15061

- **Nature and cause of the incident**

On July 10, 2023, at approximately 08:55, the Ethane Cracking Unit (ECU) Acetylene Reactor system tripped, resulting in flaring to the high pressure flare system. The flaring caused two discrete smoking events of the HP Elevated Flare on the morning July 10, 2023, in addition to excess emissions through the evening of July 11, 2023. The ECU trip also indirectly resulted in the temporary shutdown of the Polyethylene Manufacturing Lines (PE units) (Source ID 202). The PE unit restarts resulted in additional flaring to HP Ground Flares that continued through the afternoon of July 13, 2023.

Investigation of the cause of the initiating event, the ECU trip, quickly commenced and was determined to stem from the activation of an Emergency Isolation System switch from the central control building. Since the switch was not intentionally activated, further investigation revealed that there was a loose wire inside of the EIS/EDS (Emergency Isolation System/Emergency Depressuring System) panel located in the control building, which defaulted the switch to an activated state.

- **Status of outstanding corrective action**

1. Pending as of August 9, 2023: Bypass all EIS/EDS switches in the Utilities and General Facilities area and check for any incomplete connections. Secure any loose wires.
 - a. This action has been complete.

If you have any questions regarding this matter, please contact me at (724) 709-2467 or kimberly.kaal@shell.com.

Sincerely,

Kimberly Kaal
Environmental Manager, Attorney-in-Fact

CC:
Scott Beaudway, Air Quality Specialist
Kristin Goddard, Environmental Compliance Specialist
Beth Speicher, Environmental Group Manager