



January 10, 2024

VIA ELECTRONIC MAIL (Kimberly.Kaal@shell.com)

Ms. Kimberly Kaal
Environmental Manager, Attorney-in-Fact
Shell Chemical Appalachia LLC
300 Frankfort Road
Monaca, PA 15061-2210

Re: Impingement and Entrainment (I&E) Sampling Plan
Shell Polymers Monaca Site
NPDES Permit PA0002208
Potter Township, Beaver County

Dear Ms. Kaal:

The Department of Environmental Protection (DEP) reviewed the I&E Sampling Plan (Sampling Plan) submitted to DEP on October 14, 2023 by Shell Chemical Appalachia, LLC pursuant to Part C, Condition XI.E of NPDES Permit PA0002208. DEP has the following comments on the Sampling Plan:

Impingement

- An efficiency study should be completed.

Entrainment

- During peak entrainment periods, entrainment sampling should occur bi-weekly. Peak entrainment can be determined by reviewing historic studies nearby. Generally, the peak entrainment period is from late spring to early fall.
- Four samples spread across a 24-hour period should be collected per sampling event. One sample per six-hour window.
- Samples should not be composited. The results should provide insight into diurnal entrainment variation.
- A sequential replicate should be completed every twenty samples. Sequential replicates are completed during the same six-hour window. Multiple sequential replicates throughout a study should be rotated during different six-hour windows with priority placed on windows with expected higher entrainment rates (evening, night).

Ms. Kimberly Kaal

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Please address DEP's comments and submit a revised Sampling Plan to DEP by February 9, 2024. If you have any questions or want to schedule a call to discuss DEP's comments, please contact me at 412.442.4144 or rydecker@pa.gov.

Sincerely,

A handwritten signature in black ink that reads "Ryan C. Decker". The signature is written in a cursive style with a large, stylized "R" and "D".

Ryan C. Decker, P.E.
Environmental Engineer
Clean Water Program

cc: Kenric Taylor – Shell Chemical Appalachia LLC, (Kenric.Taylor@Shell.com)
Jason Schultz, Environmental Engineer – Shell Chemical Appalachia LLC
(Jason.Schultz2@shell.com)
Regional file (OnBase)