| 27 | 00-FM-AQ0023 Rev. 1/2008 pennsylvania DEPARTMENT OF ENVIRONMENTAL PROTECTION | | INSPECTIO | N RE | PORT | Commonwealth of Pennsylvania Department of Environmental Protection Air Quality Program | | | | | |
|---------------------|--|-------------------------------|---|-----------------------------|----------------------------------|---|--------------------------------------|-------------------------------------|--|--|--|
| | 23/23 SM GP [|] | Permit #(s): PA-04-00740A, B, C | Expiration | on Date: | Case 04 | e #: -00740 | PF ID #: 775836 | | | |
| | mpany Name: hell Chemical Appalachia LLC | Municipality: Potter Township | | | | County: Beaver | | | | | |
| Sł /P | ant Name: HELL CHEM APPALACHIA ETROCHEMICALS COMPLEX | | Physical Location: Route 18 | | | | eral ID — Plant Code # -1624986-1 | : | | | |
| | sponsible Official: /illiam Watson | | | Mailing A | Address: rankfort Ro | ad | | | | | |
| | eneral Manager | | | Mona | ca, PA 1506 | 1-2 | 210 | | | | |
| | one #(s): 24-709-2825 | | | | | | | | | | |
| M | ark(X) All Inspection Types T | hat | Apply To This Ins | spectio | n: | | | | | | |
| | Full Compliance Evaluation (FCE) | | Plan Approval Inspecti | ion | | | File Review (FR) | | | | |
| | Operating Permit Inspection (PI) | | Initial Permit Inspection | n (IPI) | | | Complaint Inspection (CI) | | | | |
| \boxtimes | Routine/Partial (RTPT) | | Follow-Up Inspection (| Ref. Date | :) | | Sample Collection (SC) | | | | |
| | Minor Source(s) Inspection (RFD) | Stack Test Observatio | ation | | | | | | | | |
| | Other: | | Announced | | | | | | | | |
| Ar | nual Compliance Certification Received: |] YE | S 🗆 NO 🖾 N/A | | Date Receive | d: | | | | | |
| ΑI | MS Report Received: | ΥE | S □ NO 図 N/A | | Date Received | d: | | | | | |
| M | ark (X) All Activities That App | ly: | | | | | | | | | |
| | File Review | | Pre-Inspection Briefing | 9 | | | Exit Interview/Brief | fing | | | |
| | Pre-Inspection Observations | | Check For New/Unrep | orted Sou | ırces | | Sample(s) Collecte | ed | | | |
| | Visible Emissions Observations | | Verify Operation of CE | MS | | | Other | | | | |
| S I i | | S: 2 win | 221112 d of the Shell Chei | micals t | facility this m | norr | ning and did not | | | | |
| R I d an w | oute 18 along the Shell Chemical crossed the Route 376 bridge and did not observe any malodors as located across the Ohio Rivernissions. The weather was clean | als f d I s. I r at | acility. inspected Vanport observed Shell Ch the Dock 6 building | downw emical g. I did | vind of the S s facility toda | hell ay fi | Chemicals faci | ility this morning o 12:00 PM. I | | | |
| ar | nspected Vanport and Beaver dony malodors. | owr | nwind of the Shell (| Chemic | als facility m | iid-d | day today and c | lid not observe | | | |
| | ompany Representative: EMO TO FILE | Titl | itle: Signature: | | | | | Date: | | | |
| | EP Representative: | Titl | | | Signature: | | | Date/Time: | | | |
| S | cott Beaudway | Aiı | Quality Specialist | | Scott Beau | dwa | ay/SB | 5/23/23 | | | |
| Thi | s document is official notification that a representa | | of the Department of Environment | | | _ | | · · | | | |

inspection are shown above and on any attached pages, and may include violations uncovered during the inspection. Violations may also be discovered upon review or sesults or from any additional review of Department records. Notification will be forthcoming, if such violations are noted.

Date: 5/23/23 Reviewed By

Page 1 of 3 eFacts Inspection ID#: 3558311

Shell Chemical Appalachia LLC, 04-00740

All Listed Controls Operating

I contacted Shell Chemicals to inform them of my observations and to request the list of operating sources and control devices. Shell Chemicals provided a list of sources and control devices in operation at the time of my observations. Shell Chemicals also submitted records (attached) of an analysis of the gas composition for the material being routed to the flare.

Sources reported to be in operation during my site observation:

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5/23/2023 10:45AM to 12:00PM Source and Controls Status
031 Ethane Cracking Furnace 1 - Not Operating (Pilots Only)
032 Ethane Cracking Furnace 2 - Operating (Hot Steam Standby)
033 Ethane Cracking Furnace 3 - Not Operating (Pilots Only)
034 Ethane Cracking Furnace 4 - Not Operating (Pilots Only)
035 Ethane Cracking Furnace 5 - Not Operating (Pilots Only)
036 Ethane Cracking Furnace 6 - Not Operating (Pilots Only)
037 Ethane Cracking Furnace 7 - Operating (Hot Steam Standby)
101 Cogen 1 CT+ DB - Operating
102 Cogen 2 CT+ DB - Operating
103 Cogen 3 CT+ DB - Operating
104 Cogeneration Plant Cooling Tower - Operating
105 Diesel-Fired Emergency Generator Engines - Standby
106 Fire Pump Engines - Standby
107 Natural Gas Fired Emergency Generator Engines - Standby
201 Ethylene Manufacturing Line - Not Operating (Preparing for Startup)
202 Polyethylene Manufacturing Lines - PE1, PE2, PE3 Not Operating (Preparing for Startup)
203 Process Cooling Tower - Operating
204 Low Pressure (LP) Header System - Operating LP Incinerator and Multipoint Ground Flare
205 High Pressure (HP) Header System - Operating HP Ground Flare A and B, HP Elevated Flare on Standby
206 Spent Caustic Vent Header System - Operating Spent Caustic Vent Incinerator
301 Polyethylene Pellet Material Storage/Handling/Loadout - Not Operating
302 Liquid Loadout (Recovered Oil) - Not Operating
303 Liquid Loadout (Pyrolysis Fuel Oil, Light Gasoline) - Not Operating
304 Liquid Loadout (C3+, Butene, Isopentane, Isobutane, C3+ Ref) - Not Operating
305 Liquid Loadout (Coke Residue/Tar) - Not Operating
401 Storage Tanks (Recovered Oil, Equalization Wastewater) - Operating
402 Storage Tank (Spent Caustic) - Operating
403 Storage Tanks (Light Gasoline) - Operating
404 Storage Tanks (Hexene) - Operating
405 Storage Tanks (Misc Pressurized/Refrigerated) - Operating
406 Storage Tanks (Diesel Fuel > 150 Gallons) - Operating
407 Storage Tanks (Pyrolysis Fuel Oil) - Operating
408 Storage Tanks (Diesel Fuel < 150 Gallons) - Operating
409 Methanol Storage Vessels and Associated Components -Operating
501 Equipment Components - Operating
502 Wastewater Treatment Plant - Operating
503 Plant Roadways - In Use
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PADEP Policy Information

Effective January 16, 2021, all air quality applications, Permits, Requests for Determinations and initial Asbestos Notifications will be subject to new and/or increased fees. The new fees and other PADEP Air Quality information can be found at: https://www.dep.pa.gov/Business/Air/Pages/default.aspx

As of July 29, 2021, the Source Testing Section has gone paperless. An individual Source Testing Section reviewer may request a hard copy from the facility or the consultant. Note that the section will continue to require electronic submissions of protocols and reports to the resource email account (<u>raepstacktesting@pa.gov</u> or by disk and snail mail when the file is over 35 MBs). Periodic Monitoring reports (generally three 20-minute test runs) shall only be submitted to the regional office.

As of November 10, 2021, there have been some changes to how the regional offices will accept electronic submission. OnBase submissions of protocols and reports will no longer be accepted for Source Testing.

SWRO: Any email submission to <u>ra-epstacktesting@pa.gov</u> should also be CC-ed to <u>ra-epswstacktesting@pa.gov</u>. Beyond that email cc, no further submission is necessary to DEP SWRO (i.e. no hard copy or disk needed for SWRO).

HP Flare System GC Hourly Average Compositions

| - | | | | | | | | | | | | |
|--------------------|-----------|----------|---------|--------|-----------|----------|-------|-------|------------|-------|-------|--------|
| | Elemental | | | | | | | | | | | |
| | Hydrogen | Nitrogen | Methane | Ethane | Acetylene | Ethylene | C3 | C4 | C4 Olefins | C5 | C6+ | Total |
| Date and Time | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol |
| 23-May-23 10:00:00 | 0.05 | 14.35 | 48.26 | 2.57 | 0.00 | 33.83 | 0.11 | 0.82 | 0.00 | 0.00 | 0.01 | 100.00 |
| 23-May-23 11:00:00 | 0.05 | 14.10 | 48.72 | 2.53 | 0.00 | 33.68 | 0.12 | 0.77 | 0.01 | 0.00 | 0.01 | 100.00 |
| | | | | | | | | | | - | | |

LP System Thermal Oxidizer GC Hourly Average Compositions

| | Elemental Hydrogen | Nitrogen | Methane | Ethane | Acetylene | Ethylene | C3 | C4 | C4 Olefins | C5 | C6+ | Total |
|--------------------|-----------------------|----------|---------|--------|-----------|----------|-------|-------|------------|-------|-------|-------|
| Date and Time | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol |
| 23-May-23 10:00:00 | 0.03 | 17.40 | 78.04 | 4.07 | 0.00 | 0.11 | 0.10 | 0.04 | 0.00 | 0.03 | 0.17 | 100 |
| 23-May-23 11:00:00 | 0.03 | 17.31 | 77.96 | 4.17 | 0.00 | 0.14 | 0.12 | 0.06 | 0.00 | 0.03 | 0.16 | 100 |
| | | | | | · | | • | | | | | |

LP System Multipoint Ground Flare PE1/2 Episodic Vent Header

| | Elemental | | | | | | - | | | | | |
|--------------------|-----------|----------|---------|--------|-----------|----------|-------|-------|------------|-------|-------|-------|
| | Hydrogen | Nitrogen | Methane | Ethane | Acetylene | Ethylene | C3 | C4 | C4 Olefins | C5 | C6+ | Total |
| Date and Time | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol | % mol |
| 23-May-23 10:00:00 | 0.03 | 19.43 | 76.47 | 3.96 | 0.00 | 0.00 | 0.09 | 0.01 | 0.00 | 0.00 | 0.00 | 100 |
| 23-May-23 11:00:00 | 0.03 | 19.65 | 76.14 | 4.04 | 0.00 | 0.00 | 0.12 | 0.02 | 0.00 | 0.00 | 0.00 | 100 |
| | | · | | | · | | · | | | | | |