27	00-FM-AQ0023 Rev. 1/2008  pennsylvania  DEPARTMENT OF ENVIRONMENTAL PROTECTION		INSPECTIO	N RE	PORT	D	Commonwealth of epartment of Environ Air Quality P	mental Protection		
			Permit #(s): PA-04-00740A, B, C	Expiration	n Date:					
S	mpany Name: hell Chemical Appalachia LLC	)	•	ı		Ве	eaver			
SI /P	ant Name: HELL CHEM APPALACHIA ETROCHEMICALS COMPLEX		Physical Location: Route 18							
	sponsible Official: /illiam Watson					ad				
G	<sub>le:</sub> eneral Manager			Mona	ca, PA 1506	31-2	210			
	one #(s): 24-709-2825									
M	ark(X) All Inspection Types 1	That	Apply To This In	spectio	n:					
	Full Compliance Evaluation (FCE)		Plan Approval Inspect	ion			File Review (FR)	. ,		
	Operating Permit Inspection (PI)		Initial Permit Inspectio	n (IPI)		$\boxtimes$	Complaint Inspection	n (CI)		
X	Routine/Partial (RTPT)		Follow-Up Inspection (	Ref. Date	:)		Sample Collection (S	SC)		
	Minor Source(s) Inspection (RFD)		Stack Test Observation	n			Multi-Media Inspection (MM)			
	Other:		Announced							
Ar	nual Compliance Certification Received:	ES □ NO ☒ N/A	Date Received:							
ΑI	MS Report Received:	PR-04-00740A, B, C   Q4-00740   775836								
M	ark (X) All Activities That App	ly:								
	File Review	Pre-Inspection Briefing	g	g						
	Pre-Inspection Observations		Check For New/Unrep	orted Sou	ırces		Sample(s) Collected			
	Visible Emissions Observations		Verify Operation of CE	MS			Other			
S I i	IC: 2821 NAIC	CS: 2	221112		·					
I observed Shell Chemicals facility today from 9:22 AM to 10:25 AM. I was located across the Ohio River at the Dock 6 building. I did not observe any visible, fugitive or malodor emissions. The weather was overcast, dry and 61 degrees F.  I crossed the Route 376 bridge and I inspected Center Township and Potter Township downwind of the Shell Chemicals facility this morning and did not observe any malodors.										
Ιá	also observed the Shell Chemic	als	facility today from t	heir Ga	te #3 from 1					
	ompany Representative:	Tit			Signature:			Date:		
	EMO TO FILE							FR)  spection (CI)  sction (SC)  Inspection (MM)   WBriefing  Sollected  Inspection?   Yes   No  I did not observe any  I the Ohio River at ather was overcast,  wnwind of the Shell  40 AM. I did not observe any  Date/Time: 5/8/23  identified site. The findings of this		
	EP Representative: cott Beaudway		Potter Township   Beaver   Federal ID — Plant Code #: 46-1624986-1   46-1624986							
ins	s document is official notification that a represent pection are shown above and on any attached pa sults or from any additional review of Department	ges, a	and may include violations und	covered dur	ing the inspection.	Violat				

Page 1 of 3 eFacts Inspection ID#: 3550325 Date: 5/8/23 Reviewed By Kristin Goddard/kg 5.17.2023

### Shell Chemical Appalachia LLC, 04-00740

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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031 Ethane Cracking Furnace 1 - Not Operating (Pilots Only)
032 Ethane Cracking Furnace 2 - Not Operating (Pilots Only)
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 - Not Operating (Pilots Only)
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
202 Polyethylene Manufacturing Lines - PE1, PE2, PE3 Not Operating
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 B, Not Operating Ground Flare A and
HP Elevated Flare - Isolated for Maintenance per RFD 10196
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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All Listed Controls Operating except the HP Ground Flare A and HP Elevated Flare which are down and isolated for maintenance per RFD 10196

### Shell Chemical Appalachia LLC, 04-00740

#### **DEPARTMENT NOTICES**

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
08-May-23 09:00:00	0.04	8.86	86.67	4.20	0.00	0.00	0.20	0.03	0.00	0.00	0.00	100.00
08-May-23 10:00:00	0.04	8.90	86.57	4.25	0.00	0.01	0.20	0.03	0.00	0.00	0.00	100.00
08-May-23 11:00:00	0.04	8.79	86.74	4.20	0.00	0.01	0.20	0.03	0.00	0.00	0.00	100.00

HP Ground Flare A and HP Elevated Flare are down for maintenance per RFD 10196

#### **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
08-May-23 09:00:00	0.03	22.95	73.20	3.62	0.00	0.00	0.14	0.02	0.00	0.01	0.04	100
08-May-23 10:00:00	0.03	23.84	72.33	3.60	0.00	0.00	0.14	0.02	0.00	0.01	0.04	100
08-May-23 11:00:00	0.03	24.97	71.31	3.48	0.00	0.00	0.14	0.03	0.00	0.01	0.04	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
08-May-23 09:00:00	0.03	20.00	76.05	3.73	0.00	0.00	0.15	0.04	0.00	0.00	0.00	100
08-May-23 10:00:00	0.03	18.91	77.07	3.80	0.00	0.00	0.15	0.04	0.00	0.00	0.00	100
08-May-23 11:00:00	0.03	18.51	77.51	3.75	0.00	0.00	0.15	0.04	0.00	0.00	0.00	100
								·		·	·	·