

**INSPECTION
REPORT**

Date(s) of Inspection: 11/20/19	TV SM NM	PA GP MEGA	Permit #(s): PA-04-00740A	Expiration Date: 5/28/21	Case #: 04-00740	PF ID #: 775836
Company Name: Shell Chemical Appalachia LLC			Municipality: Potter Township		County: Beaver	
Plant Name:			Physical Location: Route 18		Federal ID — Plant Code #: 46-1624986-1	
Responsible Official: Jeff Krafve				Mailing Address: 4301 Dutch Ridge Road		
Title: General Manager				Beaver, PA 15009-9600		
Phone #(s): 724-709-2411						

Mark (X) All Inspection Types That Apply To This Inspection:

<input type="checkbox"/> Full Compliance Evaluation (FCE)	<input type="checkbox"/> Plan Approval Inspection	<input type="checkbox"/> File Review (FR)
<input type="checkbox"/> Operating Permit Inspection (PI)	<input type="checkbox"/> Initial Permit Inspection (IPI)	<input type="checkbox"/> Complaint Inspection (CI)
<input type="checkbox"/> Routine/Partial (RTPT)	<input type="checkbox"/> Follow-Up Inspection (Ref. Date: _____)	<input type="checkbox"/> Sample Collection (SC)
<input type="checkbox"/> Minor Source(s) Inspection (RFD)	<input type="checkbox"/> Stack Test Observation	<input type="checkbox"/> Multi-Media Inspection (MM)
<input type="checkbox"/> Other: ADMIN	<input type="checkbox"/> Announced	

Annual Compliance Certification Received: YES NO N/A	Date Received:
AIMS Report Received: YES NO N/A	Date Received:

Mark (X) All Activities That Apply:

<input type="checkbox"/> File Review	<input type="checkbox"/> Pre-Inspection Briefing	<input type="checkbox"/> Exit Interview/Briefing
<input type="checkbox"/> Pre-Inspection Observations	<input type="checkbox"/> Check For New/Unreported Sources	<input type="checkbox"/> Sample(s) Collected
<input type="checkbox"/> Visible Emissions Observations	<input type="checkbox"/> Verify Operation of CEMS	<input type="checkbox"/> Other

Compliance Status: In Out Pending Awaiting Co. Report Needs a Follow-Up Inspection? Yes No
 SIC: 2821 NAICS: 221112

Today I performed an Administration inspection of the Shell Chemical Appalachia LLC Petrochemical Complex located in Beaver County. The admin inspection's intent was to verify the construction status of each source and control device and to provide a general update of the status of the facility. The information was provided by Mr. James Sewell, Shell Environmental Manager.

Currently, Shell's administrative offices for their asset team is located at 4301 Dutch Ridge Road, Beaver County. Shell is leasing this space until the completion of the construction of the administrative building at the Petrochemical Complex.

Shell estimated that the Petrochemical Complex construction was ~46% complete overall.

Company Representative: <i>H. James Sewell</i>	Title: <i>CSA Environmental Manager</i> <i>Attorney-in-Fact</i>	Signature: <i>H. James Sewell</i>	Date: <i>11/27/19</i>
DEP Representative: Scott Beaudway	Title: Air Quality Specialist	Signature: <i>Scott Beaudway</i>	Date/Time: 11/20/19

Shell Chemical Appalachia LLC, Potter Township, 04-00740

The estimated start-up for the Water Treatment and Wastewater Treatment is mid-2020, followed by the Cogeneration area in 2020, and approximately one year afterward the completion of construction/initial production. Currently, there are ~7500 workers on site, between the day and night shift.

The Emergency Response Plan is essentially finished, although we need to finalize some specific information in the ERP for the administrative office phone numbers and secondary containment area final dimensions once construction is completed. The Incident Command Post is the site administrative office and several local offsite alternative locations (Hilton Garden Inn in Monaca, PA or The Willows in Industry, PA) have been identified.

The following is a list of all permitted sources at the facility and their current status:

Source ID	Source Name	Status
031	ETHANE CRACKING FURNACE #1	Construction has commenced
032	ETHANE CRACKING FURNACE #2	Construction has commenced
033	ETHANE CRACKING FURNACE #3	Construction has commenced
034	ETHANE CRACKING FURNACE #4	Construction has commenced
035	ETHANE CRACKING FURNACE #5	Construction has commenced
036	ETHANE CRACKING FURNACE #6	Construction has commenced
037	ETHANE CRACKING FURNACE #7	Construction has commenced
101	COMBUSTION TURBINE/DUCT BURNER UNIT #1	Construction has commenced
102	COMBUSTION TURBINE/DUCT BURNER UNIT #2	Construction has commenced
103	COMBUSTION TURBINE/DUCT BURNER UNIT #3	Construction has commenced
104	COGENERATION PLANT COOLING TOWER(S)	Construction has commenced
105	EMERGENCY GENERATOR ENGINES (4)	Engines will NOT be installed
106	FIRE PUMP ENGINES (3)	Construction has commenced, only 2 engines will be installed
201	ETHYLENE MANUFACTURING LINE	Construction has commenced
202	POLYETHYLENE MANUFACTURING LINES	Construction has commenced
203	PROCESS COOLING TOWER(S)	Construction has commenced
204	LOW PRESSURE (LP) HEADER SYSTEM	Construction has commenced
205	HIGH PRESSURE (HP) HEADER SYSTEM	Construction has commenced
206	SPENT CAUSTIC VENT HEADER SYSTEM	Construction has commenced
301	POLYETHYLENE PELLET MATERIAL STORAGE/HANDLING/LOADOUT	Construction has commenced
302	LIQUID LOADOUT (RECOVERED OIL)	Construction has commenced
303	LIQUID LOADOUT (PYROLYSIS FUEL OIL, LIGHT GASOLINE)	Construction has commenced

304	LIQUID LOADOUT (C3+)	Construction has commenced
305	LIQUID LOADOUT (COKE RESIDUE/TAR)	Construction has commenced
401	STORAGE TANKS (RECOVERED OIL, EQUALIZATION WASTEWATER)	Construction has commenced
402	STORAGE TANK (SPENT CAUSTIC)	Construction has commenced
403	STORAGE TANKS (LIGHT GASOLINE)	Construction has commenced
404	STORAGE TANKS (HEXENE)	Construction has commenced
405	STORAGE TANKS (MISC PRESSURIZED/REFRIGERATED)	Construction has commenced
406	STORAGE TANKS (DIESEL FUEL)	Construction has commenced
407	STORAGE TANKS (PYROLYSIS FUEL OIL)	Construction has commenced
501	EQUIPMENT COMPONENTS	Construction has commenced
502	WASTEWATER TREATMENT PLANT	Construction has commenced
503	PLANT ROADWAYS	Roadways are currently unpaved

Shell Chemical Appalachia LLC, Potter Township, 04-00740

Source ID	Source Name	Status
C031	SCR (ETHANE CRACKING FURNACE #1)	Construction has NOT commenced
C032	SCR (ETHANE CRACKING FURNACE #2)	Construction has NOT commenced
C033	SCR (ETHANE CRACKING FURNACE #3)	Construction has NOT commenced
C034	SCR (ETHANE CRACKING FURNACE #4)	Construction has NOT commenced
C035	SCR (ETHANE CRACKING FURNACE #5)	Construction has NOT commenced
C036	SCR (ETHANE CRACKING FURNACE #6)	Construction has NOT commenced
C037	SCR (ETHANE CRACKING FURNACE #7)	Construction has NOT commenced
C101	SCR (UNIT #1)	Construction has commenced (Catalyst has not been installed)
C101A	OXIDATION CATALYST (UNIT #1)	Construction has commenced (Catalyst has not been installed)
C102	SCR (UNIT #2)	Construction has commenced (Catalyst has not been installed)
C102A	OXIDATION CATALYST (UNIT #2)	Construction has commenced (Catalyst has not been installed)
C103	SCR (UNIT #3)	Construction has commenced (Catalyst has not been installed)
C103A	OXIDATION CATALYST (UNIT #3)	Construction has commenced (Catalyst has not been installed)
C104	DRIFT ELIMINATORS (COGEN COOLING TOWER)	Construction has commenced

C202	PARTICULATE FILTERS (PE MFG)	Construction has commenced
C203	DRIFT ELIMINATORS (PROCESS COOLING TOWER)	Construction has commenced
C204	LP SYSTEM	Construction has commenced
C204A	LP INCINERATOR	Construction has commenced
C204B	LP MULTIPOINT GROUND FLARE (MPGF)	Construction has commenced
C205	HP SYSTEM	Construction has commenced
C205A	HP GROUND FLARE #1	Construction has commenced
C205B	HP GROUND FLARE #2	Construction has commenced
C205C	HP ELEVATED FLARE	Construction has commenced
C206	SPENT CAUSTIC VENT INCINERATOR	Construction has commenced
C301	FABRIC FILTERS (PE PELLET STORAGE/HANDLING/LOADOUT)	Construction has commenced (Filters have not been installed)
C406	CARBON CANISTERS (DIESEL STORAGE TANKS)	Construction has NOT commenced

The High Voltage Switch Gear Source construction has commenced. It is a potential source of SF6, Greenhouse Gas, emissions. Shell Chemical Appalachia LLC has entered into a consent order and agreement with PADEP on 11/11/19 regarding SF6. A start up notification for the high voltage SF6 equipment was sent to PADEP as required. High voltage equipment started to be energized beginning 11/12/19.

Fence line monitoring for the presence of fugitive emissions has begun. The passive monitoring equipment has been installed. Passive monitoring was started in mid-October to work out logistical items and begin to obtain background levels. There will be both continuous monitors and passive samplers on site.

The Plan Approval was extended on 5/17/19. The current Plan Approval will expire on 5/28/21.

The facility has received one dust complaint in May 2019. It was addressed by applying water to the area of the site where it was believed to be coming from. PA DEP received one dust complaint in July 2019. No fugitive emissions violations were observed. The complaint was closed.