



INSPECTION REPORT

Commonwealth of Pennsylvania
Department of Environmental Protection
Air Quality Program

Date(s) of Inspection: 4/16/19	TV <input checked="" type="checkbox"/> SM <input type="checkbox"/> NM <input type="checkbox"/>	PA <input type="checkbox"/> GP <input type="checkbox"/> MEGA <input type="checkbox"/>	Permit #(s): PA-04-00740A	Expiration Date: 6/18/19	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: Ate Visser				Mailing Address: 910 Louisiana St. (OSP 14080C)		
Title: Vice President				Houston, TX 77002-4916		
Phone #(s): 713-241-0608						

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 checked="" 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:	<input checked="" 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 PA DEP Air Quality performed an inspection at the Shell Chemical Appalachia LLC Petrochemical Complex located in Beaver County. The inspection's intent was to verify the construction status of each source and control device prior to the extension of Plan Approval PA-04-00740A, which will expire on 6/18/19. A listing of the inspection participants is included in an attachment to this report. Additional Shell site contacts during the construction phase include: Frank Jeanson, Senior Environmental Advisor and Steve Norton, HSSE Lead.

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 provided two safety briefings prior to the inspection. Mr. James Sewell, Shell Environmental Manager, estimated that the Petrochemical Complex construction was 30% complete overall.

Company Representative: <i>H. James Sewell</i>	Title: <i>Environmental Manager Attorney-in-Fact</i>	Signature: <i>[Signature]</i>	Date: <i>4/25/19</i>
DEP Representative: Scott Beaudway	Title: Air Quality Specialist	Signature: <i>[Signature]</i>	Date/Time: 4/16/19

This document is official notification that a representative of the Department of Environmental Protection, Air Quality Program, inspected the identified site. The findings of this inspection are shown above and on any attached pages, and may include violations uncovered during the inspection. Violations may also be discovered upon review of sample results or from any additional review of Department records. Notification will be forthcoming, if such violations are noted.

Shell Chemical Appalachia LLC, Potter Township, 04-00740

The estimated start-up of the Wastewater Treatment Plant is March 2020. The estimated start-up of the Cogeneration Turbines is mid-2020. The estimated completion of construction and initial production date is mid-2021. Currently, there are ~4500 workers on site. This number will increase to ~6500 workers.

I asked Mr. James Sewell, where their Incident Command Post would be located in case of an Emergency Response Incident. He said that they would use the on-site Admin Building. Mr. Sewell stated that Shell is investigating options for the location of an off-site Incident Command Post should the need arise due to a major environmental incident. I forwarded the content of this conversation to Don Bialosky, PA DEP Emergency Response Manager for follow-up.

We toured the facility in a bus and observed the status of the construction of the sources and control devices.

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

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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 NOT commenced
C101A	OXIDATION CATALYST (UNIT #1)	Construction has NOT commenced
C102	SCR (UNIT #2)	Construction has NOT commenced
C102A	OXIDATION CATALYST (UNIT #2)	Construction has NOT commenced
C103	SCR (UNIT #3)	Construction has NOT commenced
C103A	OXIDATION CATALYST (UNIT #3)	Construction has NOT commenced
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 NOT commenced
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. It will either need to be incorporated into the Plan Approval or exempted from permitting via a Request for Determination.

Fence line monitoring for the presence of fugitive emissions will begin this summer in order to establish the background conditions. There will be both continuous monitors and passive samplers.

Mr. Sewell stated that Ate Visser is no longer the Responsible Official and Shell is requesting an update to the RO in the Plan Approval Extension application to be: Jeff Krafve, General Manager, (724) 709-2452. Shell has submitted the Plan Approval Extension application to PA DEP.

I did not observe any visible, fugitive or malodor emissions from the facility during my inspection today. The facility has five water trucks on-site, which are used to control fugitive dust emissions. I did observe the water trucks in operation today.

I did not observe any violations of 25 PA Code relating to Environmental Protection.

Pennsylvania DEP

Name	Organization	CONTACT Info phone or email
MARK GOREG	PA DEP	412-442-4150 MGOROG@PA.GOV
Steve Hepler	PA DEP AQ	412-442-4170 shepler@pa.gov
Sheri Guerin	PA DEP AQ	412-442-4069 sguerin@pa.gov
Anna Fabrizi	PA DEP AQ	412-442-4107 afabrizi@pa.gov
Scott Beaudway	PA DEP AQ	(717) 847-5273 sbeaudway@pa.gov
Ed Corvis	PA DEP AQ	412-442-4168 ecorvis@pa.gov
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Brad Spayd	PA DEP AQ	412-442-5227 bspayd@pa.gov
Tim Kuntz	PA DEP AQ	412-442-4031 tkuntz@pa.gov
Jim Sewell	Shell Chemical	281-731-3287 jim.sewell@shell.co
Kim Krall	Shell Chemical	724-814-4507 Kimberly.Krall@Shell.com
Heather Poore	Shell Chemicals	(724) 709-2728 Heather.Poore@shell.co