Atlantic Coast Pipeline – Northampton Compressor Station Fact Sheet

Timeline:

- 09/17/2015 - An application for the Northampton Compressor Station is received for the operation of 3 centrifugal compressor turbines, 1 emergency generator, storage tanks, and ancillary equipment.
- 01/19/2016 – A draft permit is sent to the company for comment. They reply that an updated application will be submitted.
- 07/21/2017 – An updated application is received which increases the size of the emergency generator, adds a small emergency generator, revises the fugitive emissions calculations, and revises the sizes of the tanks.
- Currently the application remains on hold pending receipt of draft permit comments and an update of the applicability of 40 CFR 60 Subpart OOOOa.

Permitted Equipment:

Emission Source ID	Emission Source Description	Control System ID	Control System Description
CT-01 (**NSPS**)	natural gas-fired compressor turbine (Taurus 70-10802S, 96.0 million Btu per hour heat input, 11,107 horsepower ISO output)	CT-01-SCR, CT-01-OC	selective catalyst reduction in series with an oxidation catalyst
CT-02 (**NSPS**)	natural gas-fired compressor turbine (Centaur 50-6200LS, 60.0 million Btu per hour heat input, 6,276 horsepower ISO output)	CT-02-SCR, CT-02-OC	selective catalyst reduction in series with an oxidation catalyst
CT-03 (**NSPS**)	natural gas-fired compressor turbine (Centaur 40-4700S, 51.0 million Btu per hour heat input, 4,427 horsepower ISO output)	CT-03-SCR, CT-03-OC	selective catalyst reduction in series with an oxidation catalyst
EG-01 (**NSPS,NESHAP**)	natural gas-fired emergency generator (14.9 million Btu per hour heat input, 1,818 horsepower output, 1,300 kilowatts electric)	N/A	N/A

Insignificant Activities:

Source	Exemption Regulation
I-TK-1 - pipeline liquids storage tank (1,000 gallon capacity)	2Q .0102 (g)(4)
I-TK-2 - hydrocarbon waste storage tank (2,500 gallon capacity)	2Q .0102 (g)(4)
I-TK-3 - ammonia tank (13,400 gallon capacity)	2Q .0102 (g)(4)
I-WH-01 - natural gas-fired boiler (5.25 million Btu per hour heat input)	2Q .0102 (h)(1)(B)
I-Fug-01 - blowdown and purge emissions	2Q .0102 (g)(14)(B)
I-Fug-02 - piping leaks	2Q .0102 (g)(14)(B)
I-EG-02 - natural gas-fired emergency generator (148.9 horsepower, 100 kilowatts electric, NSPS JJJJ, NESHAPS ZZZZ)	2Q .0102 (h)(5)
I-TK-4 - odorant storage tank (6,000 gallons capacity)	2Q .0102 (g)(14)(B)

Emissions Profile and Fee Category Based on Draft Permit Review (analysis is ongoing):

Pollutant	Title V Emissions (tpy)	Permit Potential/Expected Actual Emissions (tpy)
TSP	18.3	18.3
PM-10	18.3	18.3
PM-2.5	18.3	18.3
SO_2	3.10	3.10
NO_x	47.8	19.6
VOC	22.1	22.1
CO	68.6	33.0

Based on the above this facility is a "small" source for fee purposes. Since this is a non-Title V facility the permitting is handled by the Regional Office.

Applicable Emission Standards:

- **2D .0516**, which limits sulfur dioxide emissions from all combustion sources to 2.3 lb/mmBtu heat input.
- **2D .0521**, which limits visible emission from all sources to 20% opacity.
- **2D .0524, NSPS Subpart JJJJ,** which applies to each of the emergency generators and regulates NOx, CO, and VOC.
- **2D .0524, NSPS Subpart KKKK**, applies to each of the turbines and regulates SO2 and NOx emissions.
- **2D .0524, NSPS Subpart OOOOa,** applies to the facility and regulates GHG and VOC (as methane) fugitive emissions.
- **2D .1111, NESHAP Subpart ZZZZ,** applies to each of the emergency generators, and has no requirements if they comply with the NSPS Subpart JJJJ rule.