

Nov. 2, 2020

Via Email: [mjativa@pa.gov](mailto:mjativa@pa.gov)  
[mgorog@pa.gov](mailto:mgorog@pa.gov)

ATTN: Melissa Jativa and Mark R. Gorog  
PA Department of Environmental Protection  
Southwest Regional Office  
400 Waterfront Drive  
Pittsburgh, PA 15222

**Re: Requesting Denial of Shell LLC's Air Permit Plan Approval  
Applications (04-00740B and 04-00740C)**

Dear Ms. Jativa and Mr. Gorog,

The Beaver County Marcellus Awareness Community (BCMAC), comprised of residents living in Beaver County in close proximity to the Shell Petrochemical Plant, has taken the lead in writing the following sign-on letter in OPPOSITION to the Air Quality Permits on the grounds that the Shell plant will further erode the quality of the air that residents in our region breathe, especially the addition of harmful particulate matter (PM2.5 and PM 10), volatile organic compounds and 55,353 MORE tons per year of climate change-exacerbating carbon dioxide.

We ask the Department of Environmental Protection to extend the period for comments 30-days or REJECT Shell Chemical Appalachia LLC's Air Permit Plan Approval Applications (04-00740B and 04-00740C) based on the following:

- The proposed changes include the addition of combustion turbines for electrical generation on-site; increased scale of railcar handling of polyethylene; increase scale of truck handling of polyethylene; changes to the composition of ground flares, with increased VOC concentrations; changes to the composition of thermal incinerators; and changes to on-site diesel generators.
- The changes also include the addition of a very impactful greenhouse gas chemical, SF6, as an insulator to electrical equipment, adding the equivalent of 854 tons of CO2 per year to the emissions of the plant. SF6 is known to be stable in the atmosphere for many years.
- The proposed changes show an overall increase of 4.7 tons per year of PM 2.5, 4.9 tons per year of PM 10 and an increase of 55,352 tons per year of CO2e emissions (with some reductions in NOx, CO, and VOCs).
- The increase in CO2e emissions is equivalent to the emissions of 10,849 passenger vehicles' emissions driving for a full year.
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- The increase will require the planting of over 830,307 seedlings each year, with each cohort needing to grow over 10 years in order to offset this amount of

carbon every year. (<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>)

- The updated table below highlights once again the significant amount of air emissions that will be broadcasted into the Ohio River Valley in Beaver County:

**Table 18: Facility-Wide PTE and Emission Changes**

Air Contaminant	Final Emission Rate <sup>a</sup> (tpy)	Previous Emission Rate <sup>b</sup> (tpy)	Change in Emissions <sup>c</sup> (tpy)
NO <sub>x</sub>	328.5	348	(19.5) <sup>d</sup>
CO	983.7	1,012	(28.3) <sup>d</sup>
PM (filterable)	74.3	71	3.3
PM <sub>10</sub>	168.9	164	4.9
PM <sub>2.5</sub>	163.7	159	4.7
SO <sub>x</sub>	22.4	21	1.4
VOC	516.2	522	(5.8) <sup>d</sup>
HAP	32.0	30.5	1.5
Ammonia	154	152	2
CO <sub>2</sub> e	2,303,645	2,248,293	55,352

<sup>a</sup> This column shows total facility-wide emissions including the as-built changes of Plan Approval PA-04-00740C.

<sup>b</sup> This column shows total facility-wide emissions from Plan Approval PA-04-00740A.

<sup>c</sup> This column shows the change in emissions resulting from the as-built changes of Plan Approval PA-04-00740C.

<sup>d</sup> Parenthetical values represent a decrease in emissions comparing Plan Approval PA-04-00740C to PA-04-00740A.

(Source:

<http://files.dep.state.pa.us/RegionalResources/SWRO/SWROPortalFiles/Shell/PIanApprovalC/PA-04-00740C-%20Signed%20Review%20Memo.pdf>)

- The Shell plant will add significant amounts of volatile organic compounds (VOC's) to our region's already highly polluted air and NO<sub>x</sub>, both of which are primary contributors to the formation of Ozone.
- The American Lung Association assigns Beaver County a grade of "F" for Ozone, even before this plant has come on-line. Adding more to this pollution will only worsen health problems for Beaver County residents. (See: <https://www.stateoftheair.org/city-rankings/states/pennsylvania/beaver.html>)
- Beaver County has the following numbers of people who are vulnerable to pollution because of health risks:
  - Pediatric Asthma: 3,113
  - Adult Asthma: 13,373
  - COPD: 10,199
  - Lung Cancer: 105
  - Cardiovascular Disease: 14,213
  - Ever Smoker: 57,941
  - Children Under 18: 31,988

- Adults 65 & Over: 35,412
  - Poverty Estimate: 18,061
  - Non White: 17,483
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- The Pennsylvania DEP may permit the Shell Petrochemical Facility to emit 516 tons of VOC's annually, making it the largest source of VOC emissions in western Pennsylvania, and the third largest in the state.
  - The updates also highlight the definitions of what constitute "startup" and "shutdown" conditions. The community needs to be alerted to these new definitions, as they determine when Shell is obligated to share emissions information with the community through its active and passive monitoring equipment as part of its settlement agreement for its air permit as well as documenting which emissions count for disclosure purposes to PA DEP for normal operational emissions limits as counting towards its permitted approved emissions amounts. (See: P. 52-53:  
<http://files.dep.state.pa.us/RegionalResources/SWRO/SWROPortalFiles/Shell/PIanApprovalC/PA-04-00740C-%20Signed%20Review%20Memo.pdf>)

Sincerely,

Nora Johnson for  
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