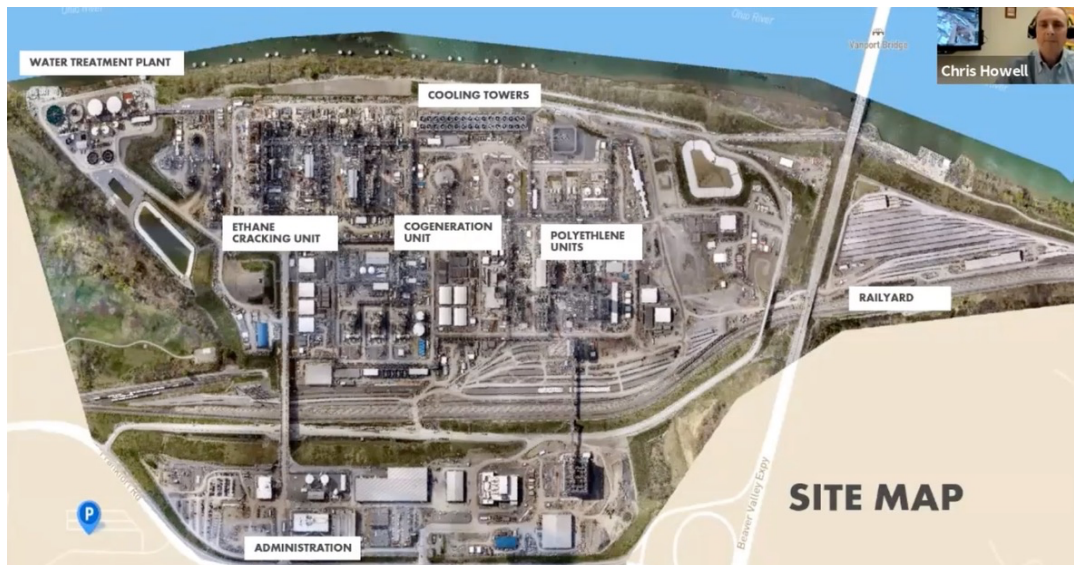


# THE SHELL ETHANE CRACKER: *What You Need to Know*

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1. Startup of the Shell ethylene plastics plant under construction in Potter Township, Beaver County, Pa. is scheduled for 2022. It is owned by Shell Chemical Appalachia LLC, a subsidiary of Royal Dutch Shell, the fifth largest company in the world. (WSJ)
2. Petrochemical plants “crack” ethane into polyethylene pellets called “nurdles” that will be used to manufacture plastic and chemical products. ([Shell Polymers](#))
3. The Shell plant in Beaver County would be the second highest hazardous air polluter in the state and the 20<sup>th</sup> most polluting plant in the country. ([2015 EPA Toxic Release Inventory](#))
4. Betting the region’s economic future on petrochemical and production of plastics is like ordering more deck chairs for the Titanic. It would send the entire Ohio River Valley backward into the dark and dirty days of the polluted past instead of forward toward a clean energy economy that provides clean jobs for workers and a healthy future for families and the environment.
5. If you live in Beaver County, the air you breathe already puts your health at risk. The American Lung Association 2020 again gave Beaver County an F for Ozone. Ozone or smog is harmful to lung health.
6. Cancer risk in Beaver County exceeds 30 in a million, which is elevated over the national average of cancer risk. Adding hazardous air pollutants to this existing situation will only make matters worse from a cancer perspective ([NATA 2104, EPA EJ Screen 2019](#)).
7. The Shell plant would be the largest source of volatile organic compounds (VOCs) in southwestern Pennsylvania. VOCs contain acrolein, ammonia, naphthalene, benzene, ethylene glycol, formaldehyde, methylene chloride, tetrachloroethylene, toluene and xylene. The VOC emissions would be six to seven times higher than Horsehead reported in 2011, 522 tons compared with 77 tons. (PA DEP 2016 Conditional Use Permit)

8. VOCs cause eye, nose and throat irritation, frequent headaches and nausea. They can also damage the liver, kidney and central nervous system, exacerbate symptoms of asthma and cause cancer. ([PRETA Study](#))
9. It is estimated that the Potter Township plant will emit 2.2 million tons annually of carbon dioxide – equivalent to putting another 433,000 passenger cars on the road each year. (EPA's Greenhouse Gas Calculator)
10. A single petro plant would require industry to open more than 1000 new gas wells every 3 to 5 years to supply feedstock for plastics manufacturing (Dr. John Stoltz). Studies have shown that gas wells located in close proximity to communities result in health risks to children and sensitive populations. ([Environmental Health Project](#))
11. Dozens of children and young adults have been diagnosed with Ewing sarcoma and other forms of cancer in a four-county area outside Pittsburgh. ([Pittsburgh Post-Gazette](#))
12. Fracked methane gas will be transported by "gathering" pipelines from gas well pad/ fracking sites throughout the Ohio River Valley to cryogenic plants where ethane and other heavy natural gas liquids will be extracted. The "volatile liquid ethane" is then transported by the Falcon pipeline to the Shell plant where it will be processed into plastic. (PA DEP)
13. The Falcon pipeline would pass through densely populated neighborhoods, 25 landslide-prone areas, the watershed of the Ambridge Reservoir, habitats of several endangered and threatened species, within 1/4 mile of 240 private water wells. It will intersect 31 streams and 174 wetlands including the Independence Marsh. ([PA DEP](#))
14. For every three jobs created by the shale gas industry, someone's life in the region will be cut short by a year. The industry is already responsible for thousands of premature deaths. ([CMU Study, Dec. 2019](#))
15. Since 2007, the gas industry has given \$11.3 million to political candidates, committees and parties in Pennsylvania. ([Marcellus Money](#))
16. The Shell ethane cracker has the capacity to produce over 1 million metric tons of plastic a year. The plastic commodity will be used in U.S. and shipped overseas. ([Shale Crescent USA](#))
17. The PTTG plant is a second petrochemical ethane cracker in the permitting phase in Belmont Ohio, across the river from Wheeling, WV and upwind from the Pittsburgh and southwestern Pennsylvania. It has not yet received final funding. (Sierra Club Ohio)
18. Pennsylvania taxpayers will contribute \$1.6 billion in taxpayer dollars toward the construction of the Shell plant which provide 400-600 permanent full-time jobs. This equates to a subsidy of \$2.7 million per job. Contrast this with New York State's commitment of \$1.5 billion for 40,000 renewable energy jobs in the state, or a subsidy of \$37,500 per job. ([U.S. News and World Report](#))
19. The Climate Change implications for this industry are disastrous. More than 2.2 million tons of Carbon Dioxide will be emitted from this plant PER YEAR making Paris Climate Accord targets impossible, especially if 5-7 plants are built in the region.
20. We must put pressure on all elected officials to develop plans for a Clean Energy Economy for the Ohio River Valley and bring in clean jobs and businesses. Support Reimagine Beaver, a citizens group working on this.