

Petrochemical Build-out in the Appalachian Region

What is the Appalachian Petrochemical Build-Out?

Petrochemicals are substances made from petroleum or shale gas (what some people call “fracked gas”). These substances can be used to manufacture a number of industrial products, including plastics, fertilizer, pesticides, dyes, detergents, and even gasoline.

Before now, most petrochemical complexes were centered in southern states, like Louisiana and Texas. But because shale gas is readily accessible in the Appalachian region, petrochemical complexes are being built or planned throughout Pennsylvania and in parts of Ohio and West Virginia.

When we talk about the petrochemical build-out in Appalachia, we must also understand the enormous amount of infrastructure these industrial complexes require:

- Petrochemical plants
- Wells
- Pipelines
- Compressor stations
- Pigging operations
- Storage facilities
- Gas-fired power plants
- Cryogenics plants
- Waste treatment operations

In addition to pipelines, a vast network of transportation—trucks, trains, barges—are needed to move raw materials, finished products, and waste.

HealthFirstPA’s partner organizations are working to halt the proliferation of petrochemical plants that pose greatly higher health risks to people living in proximity to them.

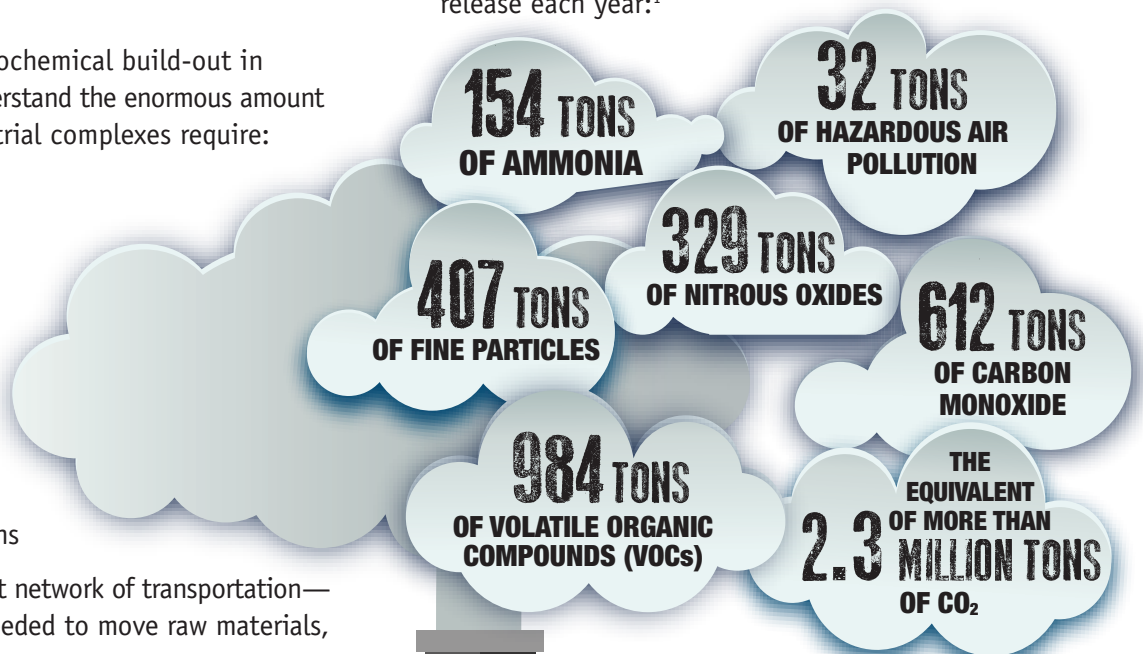


“The giant plastics plant being built in our own backyard is a serious health threat to me, my family, and my neighbors.”

— Terrie B.
Aliquippa, PA

Why is an Appalachian Petrochemical Build-out a Bad Idea?

Producing these substances requires large industrial complexes that emit high levels of pollution into the environment. For example, the Shell plastics cracker plant in Beaver County, PA, has been permitted to release each year:¹



This smog-forming pollution is the equivalent of putting an additional 36,000 cars on the road.²

Pollution from a petrochemical build-out will make climate change worse and spawn more storms, droughts, fires, and other extreme weather events.³ Higher temperatures increase the likelihood of respiratory illnesses, heart problems, insect-borne diseases (like Lyme disease), and heat-associated deaths.⁴

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Air pollution is linked to roughly 9 million deaths worldwide annually.⁵ *That's about 1 in 6 of all deaths!*

While these emissions are a global threat, petrochemical complexes also have a significant impact on the health of residents living nearby. Because of documented health impacts from oil and gas emissions and waste, an 85-mile stretch of land in Louisiana is commonly called “Cancer Alley.”⁶ Moving these complexes to Appalachia will create comparable cancer risks.⁷

People living close to petrochemical plants and the accompanying operations are also at higher risk of:

- Neurological problems⁸
- Cardiovascular disease⁹
- Respiratory disease¹⁰
- Premature births, Low birth weights, and birth defects^{11,12}
- Asthma attacks¹³

Loud noise and glaring lights from these complexes are also a concern as they create stress, anxiety, and mental health issues for residents.¹⁴

People who work at these sites are also at higher risk of exposure from leaks, either planned or accidental, and from explosions and fires.

Children, the elderly, and those with chronic medical conditions are especially vulnerable to experiencing health impacts from petrochemical emissions.¹⁵



What Can You Do?

If you live near a petrochemical plant or accompanying operations, there are a number of actions you can take to help protect yourself, your family, and your friends from pollution:

- If you see, smell, or feel something that might indicate an emergency—like a spill of fluids, a fire or flaring event, a strong chemical smell, ground tremors, or another incident—report these immediately to local authorities and to the department of health that serves your area.
- Keep a health diary that tracks any symptoms, such as congestion and nosebleeds, headaches, breathing problems, chest pain, abdominal pain, skin rashes, and stress (a side effect of pollution exposure) and discuss acute or chronic health symptoms with your doctor.
- Use resources like AirNow.gov to determine current air quality. When bad air quality is likely, close windows and limit outdoor activities, or go elsewhere if you can. During very unhealthy conditions, stay indoors.
- Speak out at hearings or provide comments to governing bodies considering permits, and call for meaningful fines and other penalties for any company violating laws and regulations; advocate for air quality monitors placed close to sources of pollution and sensitive enough to detect pollutants that might impact residents' health.

Petrochemical complexes put public health at risk. Your actions can help to protect all of us from harmful pollution.

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