



EARTHWORKS

April 17, 2018

Policy Office
Pennsylvania Department of Environmental Protection
Rachel Carson State Office Building, 400 Market Street
Harrisburg, PA 17101

Dear Ms. Drake:

On behalf of Earthworks and as a resident of Washington County, Pennsylvania, thank you for the opportunity to submit comments on the Shell Pipeline Company, Falcon Ethane Pipeline Joint Permit Application for Pennsylvania Chapter 105 Water Obstruction and Encroachment Permit and US Army Corps of Engineers Section 404 Permit (hereafter “Shell permit application”).

This permit application fails to adequately address key impacts of this project to land, water and air. Moreover, as recent precedents with natural gas liquid (NGL) pipelines such as the Mariner East 2 demonstrate, such industrial projects cannot be conducted without negatively impacting the environment and endangering human health. On these grounds, we urge you to deny this permit application.

Earthworks is a nonprofit organization dedicated to protecting communities and the environment from the impacts of mineral and energy development while seeking sustainable solutions. For more than 25 years, we’ve worked to advance policy reforms, safeguard land and public health, and improve corporate practices. Our Oil & Gas Accountability Project works with local communities, partner organizations, public agencies, and elected officials to advance these goals nationwide, including in Pennsylvania.

Permit application omits key land and water impacts

A number of currently unpermitted but absolutely fundamental aspects of this project will lead to land disruption and water body impacts. Therefore, these aspects of the pipeline should be declared within this permit application and considered by DEP in its review. Land and water disturbances not fully accounted for in this permit application include:

- 18 proposed uses of horizontal directional drilling (HDD)
- Unknown number of pumping stations
- Four proposed metering stations
- Additional gathering and distribution lines
- Access roads for construction and maintenance for all infrastructure associated with the pipeline

The pipeline’s route¹ would also cross 300 streams and 174 wetlands and a drinking water reservoir serving 30,000 people. The known potential for negative impact to water bodies is substantial, and the infrastructure not declared in this permit application--but required for the pipeline’s operation--only adds to that risk.

Additional risks raised but not fully addressed by this permit application include those to public safety. The segment of the region’s population in danger is significant: an analysis by non-profit FracTracker Alliance indicates that the 1,000 foot zone of explosion risk around the pipeline contains 550 homes, 20 businesses, 240 groundwater wells, 12 public parks, five schools, six day care centers, and several hiking and biking trails. The permit application does not include plans for emergency notifications or evacuations.

Permit application does not prove project can be completed safely

¹ <https://www.fractracker.org/2018/01/wingspan-falcon-pipeline/>

Dedicated to protecting communities and the environment from the adverse impacts of mineral and energy development while promoting sustainable solutions.

1612 K St. NW, Suite 904
Washington, DC 20006
202.887.1872

EARTHWORKSACTION.ORG

 earthworksaction

 @earthworks



EARTHWORKS

Dedicated to protecting communities and the environment from the adverse impacts of mineral and energy development while promoting sustainable solutions.

1612 K St. NW, Suite 904
Washington, DC 20006
202.887.1872

EARTHWORKSACTION.ORG

 earthworksaction

 @earthworks

Without a doubt, the Falcon ethane pipeline is a significant project with major and unacceptable potential impacts. The environmental problems that have arisen during construction of another NGL pipeline in Pennsylvania, the Mariner East 2, are a reminder of the consequential nature of such projects. In light of persistent problems with Mariner East 2--so significant that the DEP issued a month-long shut-down of construction--projects like this cannot be completed safely.

As of March 2018², the construction of Mariner East 2 has resulted in 99 inadvertent returns (IRs) and numerous sinkholes, and as of August 2017, over 200,000 gallons of spilled fluids in 42 distinct locations³. Like the Mariner East 2, the Falcon pipeline would traverse fragile karst topography, which increases the likelihood of IRs and sinkholes. This permit application does not address the measures that would allow Shell Pipeline Company to safely construct an NGL pipeline in similar geologic conditions and avoid similar egregious construction errors.

Piecemeal permitting obscures cumulative impacts

As demonstrated by the inadequately addressed impacts to land and water, the piecemeal, fragmentary, and incomplete nature of the information presented by Shell in this permit application--and institutionalized by the permitting process itself--have made it impossible to assess key impacts of the project.

Air quality presents a pertinent example of how piecemeal permitting limits public knowledge and the ability of the public and DEP to assess the impacts of this project. The Falcon ethane pipeline comes with notable risks to the region's air quality, and yet none of these are addressed in this permit nor any other permit that assesses regional impacts.

Ethane is a greenhouse gas that combines with sunlight to form ground-level ozone. According to the US EPA, even relatively low levels of ozone can cause health effects. Ethane emissions and unplanned leaks from the at least eight valves, four metering stations, and unknown number of pumping stations along its route through Pennsylvania will contribute to ozone. Though Shell has chosen to omit reference to pumping stations in its permit application, these are likely an essential piece of the infrastructure that will require significant disturbances of water and land--and ultimately impact air quality. The Mariner East 2 pipeline, for example, which will transport NGLs including ethane, has pumping stations planned approximately every 40 miles⁴.

Additional significant impacts not declared in this permit application but directly related to the construction of the pipeline include those from 18 proposed uses of horizontal directional drilling. The increased production at wellheads and associated processing and compression facilities throughout the region to feed the Falcon pipeline will also impact water and land and contribute to the region's air pollution burden. None of these emissions were included in the emissions reductions credits (ERCs) for Shell's ethane cracking facility itself, nor the hard-won ERCs Shell negotiated. Yet, the public is denied any opportunity to consider these impacts to the region's land, water, and air, instead leaving these decisions to disparate townships along the pipeline's route.

This pipeline's emissions and contributions to ozone formation are of concern to the entire air quality region. The three counties in the pipeline's route have ozone levels at 70 ppb or hovering just below--meaning they are barely within attainment of the EPA's 2015 National Ambient Air Quality Standards (NAAQS). Moreover, unanswered questions remain about DEP's recent reversal in the larger seven-county air quality region. In October 2016, the DEP considered the air quality region in which this pipeline would operate--the Pittsburgh-Beaver Valley Area--to be in *non-attainment* of those standards. However, when it issued its air monitoring plan only six months later, in April 2017, the DEP recommended to the EPA a reversal of that status and declared this region to be in attainment.

² <https://www.fractracker.org/2018/03/me2-spills-sinkholes/>

³ <https://www.fractracker.org/2017/07/me2-drilling-fluid-spills/>

⁴ <https://www.fractracker.org/2017/07/me2-drilling-fluid-spills/>



EARTHWORKS

Even more problematic, DEP has proposed to remove one of the air monitors located in Washington County. This county--where I live and where the Falcon ethane pipeline will begin--has a higher childhood asthma rate than Allegheny County. And yet, DEP is dialing back air monitoring while at the same time, continuing to permit new sources of air pollution. Earthworks articulated these concerns in written comments submitted to DEP in August 2017 in response to Pennsylvania's 2017 Annual Ambient Air Monitoring Network Plan issued by DEP⁵.

The Department of Environmental Protection's stated mission "is to protect Pennsylvania's air, land and water from pollution and to provide for the health and safety of its citizens through a cleaner environment." This proposed pipeline project would not serve public benefit, but rather enable private profit from Commonwealth resources. Pennsylvanians, who own these resources, stand only to lose through the damage to their air, land, and water and through the risk to their health and safety.

As currently presented, this permit application is incomplete and the project should not be allowed to proceed. As a resident of Washington County, and on behalf of Earthworks and the communities we serve, I respectfully and strongly urge you to deny the Shell permit application.

Thank you for your time and consideration.

Sincerely,

Leann Leiter
Pennsylvania & Ohio Field Advocate, Community Empowerment Project
Earthworks Oil & Gas Accountability Project
PO Box 142, 120 W. Pike Street
Canonsburg, PA 15317
lleiter@earthworks.org
(202)887-1872 x130

Dedicated to protecting communities and the environment from the adverse impacts of mineral and energy development while promoting sustainable solutions.

1612 K St. NW, Suite 904
Washington, DC 20006
202.887.1872

EARTHWORKSACTION.ORG

earthworksaction

@earthworks

⁵ Please refer to enclosed comments.