

PO Box 4
Wingina, VA 24599
November 28, 2014

Mr. Monroe Snoddy
29900 N. James Madison Highway
New Canton, Virginia 23123

Dear Mr. Snoddy:

I've been a Buckingham County landowner and taxpayer since 2002. I built my retirement dream house and became a voter here in 2012. I'm deeply concerned about the proposed Atlantic Coast Pipeline, especially the compressor station planned for our county. There are considerable health and safety hazards associated with compressor stations which have not yet been well studied or documented. The industrial, chemical and radioactive pollution from the compressor station has the potential to sicken and kill livestock, people, and vegetation as well as to contaminate land, air and water in our beautiful county for miles around. The planned compressor station for Buckingham County is 31,515 horsepower, larger than the Titanic. It will create noise, vibration, toxic fumes and emissions 24-7-365 with increased concentrations of toxic emissions during blowdowns and other events. It could also explode, as several compressor stations have in the last 2-3 years in the United States and Canada.

There is a great deal of legitimate fear and concern about the pipeline, the toxic impact of fracking, and the planned compressor station, not only for the short-term disruption during the construction phase (the hundreds of trucks other heavy equipment, disturbance of the land and diesel pollution) but also the long-term health impacts especially of the compressor station. Several concerned citizens have formed the "Friends of Buckingham" to raise awareness about the planned project. Please view the website at: <http://www.friendsofbuckinghamva.org/>

I also do not believe the claims that the pipeline will bring long-term jobs and economic benefit to Buckingham County. A colleague of mine in the Economic Bureau at the U.S. Department of State performed the economic analysis of the Keystone XL pipeline's job creation, an international pipeline project. The Keystone XL pipeline is planned from Canada to the Gulf of Mexico, crossing the entire United States north-south. Their conclusion was that beyond short-term construction jobs, **there would only 35-full time jobs created by this massive project.** For the Atlantic Coast Pipeline, we may have temporary benefit of a few trucking jobs during the construction phase, **then permanent health and safety risk for the rest of our natural lives and for generations to come.**

Madison County, New York Department of Health on October 15, 2014 sent comments to the Federal Energy Regulatory Commission (FERC) about health hazards of compressor stations related to a planned compressor station there. I have quoted some below but urge you to read the full report at the following internet address.

<http://www.healthymadisoncounty.org/linkedddocs/reports/FERCcomments.pdf>

It is also posted on the Friends of Buckingham website. I would also be happy to send you a hard copy of the full report or email it to you as well.

Compressor stations emit volatile organic compounds or VOCs as well as a host of other toxins. Quoting from the report, here are some of the impacts:

Health Effects from exposures to VOCs: VOCs, present at compressor station construction and operation, are a varied group of compounds which can range from having no known health effects to being highly toxic. **Short-term exposure can cause eye and respiratory tract irritation, headaches, dizziness, visual disorders, fatigue, loss of coordination, allergic skin reaction, nausea, and memory impairment. Long-term effects include loss of coordination and damage to the liver, kidney, and central nervous system.** Some VOCs, such as benzene, formaldehyde, and styrene, are known or suspected carcinogens. The case for elevated risk of cancer from Unconventional Natural Gas Development (UNGD) VOC exposure has been made by McKenzie et al (2012) and others. The inhalation of the VOC, benzene, produces a number of risks including [acute (short-term)] drowsiness, dizziness, headaches, as well as eye, skin, and respiratory tract irritation, and, at high levels, unconsciousness. Chronic (long-term) inhalation exposure has caused various disorders in the blood, including reduced numbers of red blood cells and aplastic anemia, in occupational settings. Reproductive effects have been reported for women exposed by inhalation to high levels, and adverse effects on the developing fetus have been observed in animal tests. Increased incidence of leukemia (cancer of the tissues that form white blood cells) have been observed in humans occupationally exposed to benzene. EPA has classified benzene as known human carcinogen for all routes of exposure.

Benzene, which is documented at compressor stations by the States of Pennsylvania and Texas, carries its own risk, including risk for cancer. There is growing evidence that benzene is associated with childhood leukemia. Benzene affects the blood-forming system at low levels of occupational exposures, and there is no evidence of a threshold. It has been argued in the literature that “[t]here is probably no safe level of exposure to benzene, and all exposures constitute some risk in a linear, if not supralinear, and additive fashion. Another substance that is detected near compressor stations is methylene chloride. **According to the EPA, the acute (short-term) effects of methylene chloride inhalation in humans consist mainly of nervous system effects including decreased visual, auditory, and motor functions, but these effects are reversible once exposure ceases.** The effects of chronic (long-term) exposure to methylene chloride suggest that the central nervous system (CNS) is a potential target in humans and animals. Human data are inconclusive regarding methylene chloride and cancer. Animal studies have shown increases in liver and lung cancer and benign mammary gland tumors following the inhalation of methylene chloride. The VOC formaldehyde is also considered a Hazardous Air Pollutant (HAP) by the US EPA (EPA). It is one of the emissions chemicals that the natural gas development industry is required to report, for instance to the PA DEP. **According to these reports, compressor stations are the highest UNGD source for formaldehyde.** For the year 2012, emissions of formaldehyde from compressor stations in Pennsylvania ranged from 0.0 TPY to 22.5 TPY.

The number of individuals living close to compressor stations experiencing medical impact is 71%. The occurrence of other symptoms as follows is: respiratory impacts 58%; throat irritation 55%; weakness and fatigue 55%; nasal irritation 55%; muscle aches and pains 52%; vision impairment 48%; sleep disturbances 45%; sinus problems 42%; allergies 42%; eye irritation 42%; joint pain 39%; difficulty breathing 39%; severe headaches 39%.

As you know, we have a large number of elderly in Buckingham County. The elderly and children are especially at risk from environmental toxins.

REQUESTS – PLEASE TAKE ACTION TO PROTECT THE HEALTH AND SAFETY OF OUR COUNTY!

1. **Health Risks Assessment:** I urge the Buckingham County Board of Supervisors to please demand a study by the Virginia Board of Environmental Public Health and the Centers for Disease Control National Center for Environmental Health of the health hazards of compressor stations based on other communities living near a compressor station of a similar size in other parts of the country. The study should include wind patterns from the site of the compressor, types, concentrations and levels of emissions, affected animal and human populations, and impact on air, land and water from chemical toxins, carcinogens and radioactivity.
2. **Engage with FERC:** I urge the Buckingham County Board of Supervisors to please interact with FERC (Docket Number PF 15-6) to express concerns about the short-term and long-term health risks of the compressor station, preferably before January 2015.
3. **Request Maximum Mitigation:** I also urge that the Buckingham County Board of Supervisors please demand from Dominion/Duke and FERC that the compressor station provide maximum scrubbers, filters and mitigation of toxins, noise and vibration, as well as alerts to the public of any event at the compressor station, including blowdowns, as well as a comprehensive emergency response, evacuation plan, and notification of any malfunction within 24 hours. Please also request that Dominion/Duke provide adequate emergency response training and equipment to deal with any emergency event at the pipeline or compressor station, as well as training local population about the risks.
4. **Dialogue with Dominion:** I also urge that the Buckingham County Board of Supervisors please demand from Dominion that they meet with concerned county residents about the planned compressor station. We need details on its location, specifications, emissions. Please ask Dominion not to send us a low-level official with a few talking points, but a real expert that can engage with us on our specific concerns about the compressor.
5. **Withdraw Support:** I respectfully request that the Buckingham County Board of Supervisors please reconsider its support of the planned Atlantic Coast Pipeline and compressor station, given its potential huge negative long-term health and safety impact on the county. I do not believe this information was available to the Board when the decision was made – indeed, Dominion still has not given us specifics about the compressor. This will send an important message to FERC as well as to show the residents of this county that the Board of Supervisors is responsive to our concerns.

There has never been a 42-inch pipeline built east of the Mississippi. The Atlantic Coast Pipeline will destroy large swaths of scenic and natural beauty including in the GW National Forest, across the Shenandoah Mountain, close to the James River State Park, and through other conservation and recreation forest areas. Nothing can ever be planted on a pipeline right-of-way, leaving nasty scars all across the land.

Thank you in advance for taking the above steps to ensure our health and safety for generations to come.

Sincerely,

Ruth Mary Hall

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