



## BOSTON COLLEGE

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October 5, 2019

Mr. Gary Moran  
Deputy Commissioner  
Massachusetts Department of Environmental Protection  
Boston MA

Dear Deputy Commissioner Moran,

I am a physician, a former Captain in the Medical Corps of the United States Navy, and now Director of the Program in Global Public Health and the Common Good at Boston College

I am writing to express my strong opposition to the siting of a natural gas compressor station on North Weymouth MA. My reasons for opposing construction of this facility are the following:

### **1. Health and Safety Hazards**

- Fire and Explosion. Gas pipelines and compressor stations explode. One or more pipeline explosions have occurred across the United States in each of the past 5 years. The greater the pressure, the more powerful the explosion. We had an explosion last September in a low-pressure pipeline the Merrimack Valley that damaged 130 buildings, injured 23 people, including two firefighters and killed one person. We had a near miss in Lawrence last week. The leaks that cause these explosions move very quickly. They give little warning.

The North Weymouth compressor station will be located in a densely populated community that contains six schools with 1,700 students, elderly housing, nursing homes and a mental health facility. The facility will lie 20 feet from the base of the Fore River Bridge. Emergency access is limited. The North Weymouth station will pressurize gas to 1,400 pounds per square inch (psi) - 14 times the pressure in the Merrimack Valley pipeline.

- Toxic Emissions. Pipelines and compressor stations leak. Enbridge acknowledges that emissions from the Weymouth compressor station will contain benzene, formaldehyde and 1,3-butadiene – three proven human carcinogens. Benzene and butadiene cause leukemia, including childhood leukemia, and lymphoma. Formaldehyde causes leukemia and nasal cancer. These pollutants will be added to the many industrial pollutants already present in the Fore River basin.

The possibility for additive and synergistic effects among these many pollutants was given no consideration the Health Impact Assessment of this facility that your Department commissioned, a practice the opposite of that your Department followed in its 1990 assessment of the Clean Harbors proposal to place a waste incinerator in the Fore River basin.

## **2. Economic and Racial Injustice**

The communities surrounding the Fore River basin are among the poorest communities between Boston and the Cape Cod Canal. They contain large racial and ethnic minorities: 26% Asian, 7% African-American and 5% Latino.

These communities, the Mayors of Quincy and Weymouth and the entire South Shore legislative delegation are all opposed to construction of the compressor station.

Placement of a compressor station in North Weymouth in direct opposition to community residents' wishes makes a mockery of democracy. Such an action is not consistent with the United States of America that I tried to represent in my 41 years in the uniform of this great country.

## **3. Climate Hazard**

Natural gas, which consists principally of methane, has been hailed as a clean "transition fuel". But in fact, gas is associated with multiple health hazards, and it makes a substantial contribution to global climate change.

As much as 4% of all gas produced by fracking is lost to leakage, contributing substantially to recent sharp increases in atmospheric methane levels. Methane is a potent driver of global warming; pound for pound, its warming potential is 85 times greater than that of CO<sub>2</sub> over a 20-year time frame. Gas burned in stoves and boilers generates CO<sub>2</sub>. The total carbon footprint of natural gas rivals that of coal.

## **4. Unwise Business Decision**

Continued investment in a natural gas infrastructure is economically reckless – a squandering of the Commonwealth's precious resources. Investment in gas ignores the reality that in many areas of the United States it is already cheaper to generate electricity from wind and solar than from gas, oil or coal. This price realignment is expected to become widely prevalent within 3-5 years. Any investment in gas could thus become a stranded asset – a risk that will increase dramatically if the current massive federal subsidies for natural gas were to be reduced.

States that permit construction of new pipelines and compressor stations will lock in their dependence on gas for years to come. They will miss opportunities to divert public and private resources to renewables. That's the real problem with fracking: it perpetuates the current carbon-based energy system and delays the transition to a carbon-free economy.

Some of our neighboring states are moving away from gas and preparing for transition to a carbon-neutral future. Just this summer, New York State enacted comprehensive energy and climate legislation and pledged to reduce its greenhouse gas emissions by 85% by 2050. To meet this audacious target, New York has announced the US' largest wind farm, is collaborating with Ireland and Denmark to improve its electric power grid, has created economic incentives

for clean vehicles, including trucks and buses, and is encouraging energy conservation. New York is now creating new, high-paying jobs in wind and solar.

If Massachusetts builds more pipelines and compressor stations, we divert investment away from renewables. We lock ourselves into gas for years to come. We create no new energy jobs. We will fall behind our neighbors.

I urge you to thoughtfully reconsider your Department's support for construction of this facility. Construction of a compressor station in the Fore River Basin is dangerous. It is economically foolish. It is not consistent with your Department's mandate to protect the environment. It does not align with the precepts of social justice to which must have been exposed in your years at Stonehill College.

I look forward to your response.

Sincerely,

A handwritten signature in black ink, appearing to read "Philip J. Landrigan". The signature is fluid and cursive, with a long horizontal stroke at the end.

Philip J. Landrigan, MD, MSc, FAAP