Bulan Eaden

Thank you for coming here to listen to our comments. The DEP has a vital job to do and listening to the needs of our community means a great deal. I know encounters with Williams and the FERC over the Atlantic Sunrise Pipeline have left many people here feeling helpless and silent over the past two years. So, I am happy to have the chance to share my thoughts about the Atlantic Sunrise Pipeline with you.

I know some people question how could one small pipeline, so common in the United States, pose a serious threat to climate change. While compared to the Dakota Access or Keystone XL pipelines the Atlantic Sunrise pipeline may seem small, the answer is that this pipeline is neither a small nor a common pipeline. This pipeline measures 30-42 inches in diameter, travels 143 miles through ten Pennsylvania Counties, and will release 1.7 million dekatherms of dirty energy per day. To put this into perspective, 1.7 million dekatherms of energy is equivalent to the energy 85,000 acres of forest can absorb in one full year (Phillips, Wang, and Alkire; United States Environmental Protection Agency).

The cost of erosion to nearby farms and waterways from this extensive right of way for the pipeline and related construction sites could prove very harmful. The area that is now forest and farmland would convert into 37,752,000 square feet of barren land. This is essentially the loss of over 468 acres of forested land and over 299 acres of farmland (Philips, Wand, and Alkire). These numbers, furthermore, apply only to the permanent right of way left behind by the pipeline and do not speak to other disrupted landscapes such as permanent roadways or temporary construction sites.

While Williams and Transco have offered plans for erosion much of their submitted Chapter 102 plan states that erosion techniques will be practiced "when practicable." Erosion prevention, however, should be practiced in every case, not only when it is practical for this multi-million dollar, international company (Williams).

Williams submitted an incomplete plan regarding erosion prevention to the DEP and the Department responded in a letter on February 24, 2017 confirming the plan was inadequate (Kuncelman). More frightening however, is that Williams has a history of malfunction and safety violations. including numerous explosions and spills. Their plants have suffered "catastrophic" failures, have resulted in the deaths of employees and the evacuation of residents. Williams has spilled cancer-causing benzene and has contaminated soil and water past federally permissible levels. Since 2006, Williams has been issued over 42 enforcement actions and have been fined more than \$2 million dollars in civil penalties (Smart). This company should not be trusted to prevent erosion, let alone to protect environment and the public safety.

The best solution to erosion prevention, however, is already present: a rich abundance of vegetation and forested lands. A number of studies indicate that the more a "system resembles a natural forest in its canopy structure, tree spacing and ground cover, the less chance there is of soil erosion" (Forestry Department). Sediment barriers are temporary, compost filter socks become saturated, backfill can washout. Trees and vegetation, however, are renewable, bind soil effectively, and protect land from intense wind and rain.

Every cubic inch of soil contains billions of microbes, fungi and bacteria, as well as the more visible plant and animal life. A surface void of trees and vegetation, such as that which will be left behind by the Atlantic Sunrise Pipeline, is prone to increased erosion. The washed away bio-organisms leave behind depleted soil and then are swept into nearby waterways, like the adjacent Tucquan Creek, a designated Pennsylvania Wild and Scenic River ("Tucquan Glen"), the Conestoga River, and the Susquehanna River, all of which empty into the Chesapeake Bay.

The biochemical oxygen demand will increase and these newly deposited organisms will compete for oxygen with the existing plant and water life and could lead to the deaths and fish, plants, and other native bio-organisms in these waterways. Furthermore, long-term erosion from the unprotected pipeline right of way will lead to increased turbidity in these waterways. The suspended sediment in the water resulting from erosion will block sunlight and hinder the ability for plants to photosynthesize, which is, of course, essential for their survival. Additionally, turbidity causes fish to have difficulty "locating food, breathing through their gills, or finding mates based on visual cues" (Schultz). Deposit of this sediment onto the bottoms of stream and riverbeds also leads to the suffocation of fish eggs and the deaths of other macro invertebrates (Schultz).

Furthermore, the Atlantic Sunrise would emit 32.9 million metric tons of carbon per year; carbon emissions are a significant contributor to climate change. Construction of this pipeline, of course, would also foster the use of natural gas, a primary producer of

methane, which is anywhere from 30 to 80 times worse than carbon in terms of climate changing gases (Phillips, Wang, and Alkire; Abraham; Hamburg).

Not only is the Atlantic Sunrise Pipeline a danger to public health, it also involves questionable and confusing legality. The Supreme Court has ruled under the endangerment finding by the EPA that carbon pollution is a threat to public health and welfare and that it falls under The Clean Air Act and legally needs to be restricted, not increased. Additionally, laws restricting methane use continue to hold steady in Congress. For example, recently the United States Senate voted to uphold restrictions on methane emissions on public lands. This restriction does not apply to the Atlantic Sunrise Pipeline, but the dangers of methane are agreed upon almost universally in the scientific community, and this recent Senate vote shows that the public health costs of methane are becoming commonly known in the political arena as well (Brune; Eilperin and Harvey). It does not make sense for agreement to exist that climate-changing emissions are dangerous, and then to find that a large corporation has been granted legal permission to pollute our air with these same climate-changing gases.

The Atlantic Sunrise Pipeline is a danger to people, animals and the planet considering the volume of climate changing gases the project will emit and the amount of erosion it will cause. Of course, none of this even touches on the multiple other problems the project finds itself entangled in, including the desecration of Native American lands and an increase in pollution to the Susquehanna River and the Chesapeake Bay (Martin; Phillips, Wang, and Alkire).

I find myself astounded when I question how anyone could support a project like the Atlantic Sunrise Pipeline that is so clearly harmful for the planet and for the children of future generations, especially when the voluminous amount of scientific data exists that demonstrates just how destructive a project like this is.

The only reasons I can find that one would support a project like this are fear, denial, and greed, and these cannot be allowed to determine the fate of Lancaster County, the state of Pennsylvania, or the health of the planet.

Please do all you can to prevent this project from reaching completion.

Thank You,

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