Dear Catherine McCabe,

The recent stakeholder session hosted by the DEP was a good, frank discussion on issues related to modeling greenhouse gas emissions in New Jersey, and the Sierra Club appreciates the opportunity to participate. As the DEP considers requiring additional monitoring and reporting of greenhouse gas emissions, we would like to raise some issues.

Comments

First of all, we are concerned that the DEP will not have modeling rules in place until June 2021 even though the Global Warming Response Act calls for rules to be in place by January 2021. This unnecessary five-month delay in monitoring will cause delays in regulations.

The Global Warming Response Act includes a requirement of a 20-year horizon, but the current system only looks at current models on a year-by-year basis, based on a 100-year horizon. Climate change is happening faster than scientists originally thought, and New Jersey is at a disadvantage if the latest science and technology is not used when it comes to modeling. We urge the DEP to recalculate past, current, and future modeling for greenhouse gases based on the 20-year horizon required by P.L.2019, c.319 that was signed into law in December.

The current modeling system does not incorporate impacts from future or even recent emission sources. This means that additional sources that have come online recently will not be included in the modeling. Projects like the Sewaren 7 Plant, the Lambertville East Pipeline, the Roseland Compressor Station, and the Rivervale South to Market Project would not be considered using the current modeling system. The Global Warming Response Act calls for an 80% reduction in greenhouse gases from baseline year 2006 by 2050; it will be impossible for New Jersey to achieve this goal if the underlying modeling fails to incorporate emissions from all sources.

We likewise find it extremely troubling that modeling protocols for methane and black carbon will not be considered until after the Global Warming Response Act Update Report comes out in July. This puts an added delay on methane modeling and regulations, because it will take an additional three years for regulations to be put in place after the modeling protocols are decided. We can’t afford to wait an additional three years for these regulations.
Similarly, the Sierra Club is concerned that the overall modeling does not look at fugitive emissions. This means that emissions from stationary sources and pipelines that could be leaking out of the valves or the pipes themselves would not be included in the models. Fugitive emissions of methane are particularly troubling, given methane’s powerful heat-trapping properties and accordant impacts on the climate. There need to be monitors to catch these fugitive emissions, as well as audits of facilities, especially electrical and industrial, to find out what the fugitive emissions are.

Tailpipe and fugitive emissions are not the only categories that should be modeled, however. The Sierra Club also urges DEP to consider lifecycle emissions. It is impossible to get an accurate picture of real greenhouse gas emissions without looking at the overall lifecycle of fossil fuels, from emissions at the wellhead to transportation into New Jersey. Equally troubling is the fact that the current system does not incorporate emissions from building and construction materials. The fabrication of cement and other such materials emit large amounts of greenhouse gases, and therefore should be included in the models. When it comes to agriculture, we need to be looking not only at the large sources of methane but at the cumulative impact of small sources, like small chicken farms or cattle operations. The impact of fertilizer and other agricultural materials also needs to be taken into account.

It is also important to take into account the loss of land use and land cover. Changes in land use development patterns should be included in the modeling. Logging and prescribed burns result in a loss of carbon sequestration as well as greenhouse gas emissions.

One way to monitor greenhouse gases, especially methane, is to expand ambient air quality monitoring stations and include testing for methane. This will allow hotspots to be defined. The best way to monitor hydrofluorocarbon (HCF) releases is to use satellite imaging. This data could be obtained from the National Oceanic and Atmospheric Administration (NOAA). When it comes to black carbon, monitors are relatively inexpensive. New Jersey can develop a network of black carbon monitors, especially in high-traffic urban areas and near ports, that have continuous monitoring and real data going directly to DEP.

**Conclusion**

We are in a climate emergency. The U.N. Climate Report warns of a global tipping point by 2030, so it is even more important to reduce greenhouse gas emissions as quickly as we can. We urge the DEP to set an unconditional greenhouse gas reduction goal of 45% by 2030, as recommended by the 2018 Intergovernmental Panel on Climate Change (IPCC) report. The DEP has the ability to set those targets and needs to model for those targets.

There are currently 15 new fossil fuel projects in New Jersey that will increase the state’s emissions by 32%. Given the two-year timeline of Governor Murphy’s Executive Order 100, we need a moratorium on all new fossil fuel projects until we have a program in place to reduce our greenhouse gas emissions and reach 100% renewable by 2035 and net-zero carbon by 2050.
If you have any questions, or if there is any additional information I can provide, please feel free to call me at (609) 558-9100.

Sincerely,

Jeff Tittel
Director of the New Jersey Sierra Club