

Robert Layton

Comments on Ecology's review of SEIS for Kalama Methanol plant

I am a retired Aerospace Engineer living in Longview, WA. In my view, little has changed since the original SEIS and The Department of Ecology's review. Looking out of my window at the smoke and fog makes me wonder why there is any debate on whether climate change is occurring. And, why projects like this one is even being considered. We all know this project and its product will increase the release of Methane into the atmosphere. Below is a summary of some

Methane/Methanol facts:

1. Methane is 20 to 25 times worse than CO₂ in absorbing heat in the atmosphere (per Howarth, et al from Cornell University).
2. Methane emissions are increasing as CO₂ is declining.
3. Methane emissions due to fracking are increasing and is approximately 60% higher than the EPA estimates that were overlooked due to emissions occurring during abnormal operating conditions (from Alvarez, et. al).
4. Methanol stays in the atmosphere for 10 to 12 years.

Therefore, the largest effect on climate changes due to increased temperatures in the next 10 to 20 years will be from methane. Nature does not change in nice linear ways as observed by earthquakes: stress builds up and reaches a "trigger point", causing an earthquake. Likewise, climatic effects can happen in the same way. Rise in temperatures in the next 20 years can hit a trigger point relative to methane releases in the atmosphere currently stored up in the higher latitudes in the permafrost. Already, thermokarst lakes are forming due to warming and releasing increasing amounts of methane. This scenario will have a spiraling effect on climate \diamond more heat equals more methane released and more methane equals more heat. The SEIS overlooks these types of effects on methane released into the atmosphere.

It appears the SEIS underestimated the release of methane due to fracking. A paper by Sangita Bista at the Murdoch University in Australia states that the GHG emissions resulting from development of Western Australia 5 onshore gas basins using fracking would be equivalent to all the Australian emissions sources combined at 2014 levels each year for 20 years.

The SEIS makes a major assumption. It assumes the current use of coal to process olefin in China will be replaced by methane in the next 10 years. This is a just a wild guess as to what actions will be taken by the Chinese Government and what changes will happen in the marketplace. We all know that the methanol produced in Kalama may also be used for fuel. This fuel will be used to support factories, etc. resulting in more emissions.

The Ecological review has not been complete in my view. It has not addressed the problem of more olefins production and what happens when those plastic products are discarded by the consumer. We all hear about micro particles of plastic beginning to be detected in our fish, water, etc. This is also an environmental challenge.

How can any responsible person or organization approve of another project that will negatively degrade the environment. The rationale for the project is to produce a few construction jobs, that will not last long, and then very few operational jobs? With most of the financial burden being assumed by the citizens of Washington state and the United States in order to develop the manufacturing factory for the Chinese!

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