Anita J. Thomas

My friend of blessed memory, Bill Brake, worked in the petrochemical industry for 35 years, gaining considerable expertise in the workings of oil and gas facilities. In his retirement, he often gave expert testimony concerning such facilities. In January, 1980, when he was working the night shift in the Texas Panhandle town of Pampa, he felt the shock wave 50 miles away when a gas refinery in Phillips, Texas, exploded. The people survived despite some damage to their homes, but the explosion took the refinery and the town's economic base when it blew.

Not long before Bill's untimely death in 2017, he was able to examine the proposal for the NWIW facility in Kalama and noted a host of failings that made the whole project a disaster in the making. Even if the proposed facility worked as designed, it would produce unconscionable levels of greenhouse gases as inevitable collateral damage, but greenhouse gas emissions would explode astronomically in case of a tragic accident. The intervening time since Bill's death has seen changes to the NWIW proposal and three EIS statements that leave a fatal flaw at the heart of this facility untouched. The core of the problem is a disastrous disregard for basic safety built into the very concept and design of the proposal. As I am not the expert that Bill Brake was, I can list only the most rudimentary and egregious errors that seem most dire to me.

First, there are daunting external factors that are already accidents waiting to happen. To start with, the proposed site location is on shoreline fill and thus a liquefaction zone in case of significant earthquakes. The risk of ruptures, explosions, and fires is unacceptably high, including attendant increase of GHG emissions.

Next, there is the size of the project, with its massive use of Columbia River water and heating of the river. Fish kills due to overheated water would cause methane and other noxious gas emissions. Further, there is the terrifying risk of a BLEVE (Boiling Liquid Explosive Vapor Event). Even if a BLEVE were triggered by some unaccountable circumstances, such an accident would launch a breathtaking chain of destruction, due purely to the laws of physics. If the BLEVE were released at speed into the former Trojan Nuclear Site, the resultant multiplication of GHG emissions would be incalculable, not to mention disastrous to the people and community affected. Looming over any major accident is the proximity of the railroad, I-5, the community of Kalama itself, and the surrounding forest. In the case of the trees, fires would more than double GHG emissions, since the trees would be transformed from absorbers of CO2 into emitters of it in the course of combustion.

If the external factors just enumerated were the primary problem, that should be more than enough to stop the project. However, the deeper, inherent problem of human error is all but guaranteed to bring on one or more of the above problems because of the incomprehensible disregard for safety in the design and execution of this proposed refinery. To wit:
Northwest Innovation Works, LLC has no refinery employees.
NWIW has no active license with L and C.
NWIW has no income from methanol sales.
NWIW has no assets.
NWIW has no documentary evidence of credentials.
NWIW has no experience building or operating a methanol refinery. (Components would be

assembled in China and shipped over here.)
NWIW has no EPA approval for the ULE technology which is supposed to decrease GHG emissions. No methanol refinery has ever used both ULE and ZLD technology together.

All the above is horrifying enough, but the staggering incompetence outlined here goes even further. First, the design is experimental. There is only one similar refinery in the world, in Australia, It is not run by NWIW which has no experience with it. Second, according to Bill Brake a facility handling the capacity proposed by NWIW would require a minimum of 500 square acres; the Kalama proposal is for about 98 square acres. Texas has a century of experience with refineries and has come to this well established practice from hard lessons won from previous gas refinery explosions.

So NWIW is proposing to build the world's largest fracked-gas-to-methanol refinery using an untested, experimental design on the equivalent of a postage stamp sized tract of unstable fill half a mile from a nuclear storage facility, with no experience in building or operating a methanol refinery, no refinery employees, no credentials, no assets, no income from methanol sales, no L and C license, and no EPA approval for one of their GHG removal technologies, and no president anywhere for using their two GHG removal technologies together. How in the name of all good common sense has the NWIW proposal possibly made it this far in the process?

The decision you make surely includes an economic cost benefit analysis, weighing the projected jobs in Kalama against possible risks to the health, safety, and general welfare of the local area. It is incumbent on you to do due diligence, weighing the true magnitude of the genuine risk involved against the largely illusory jobs promised.

There is a precedent here which provides a cautionary tale. When the Alaska Pipeline was proposed, Alaskans were promised jobs. However, once that pipeline was approved, most of those jobs went to experienced workers from Texas and Oklahoma, one of whom was my father, a Texan. In an NWIW hearing about 4 years ago, two of the people in the crowd that I talked to were from Texas. Our local people would hardly have a fair chance against experienced workers here.

Finally, the cost benefit analysis should contain liability insurance considerations. I have found no figures available on the proposed liability limits. It is hard to imagine any adequate insurance for the proposed refinery. I fear Washington taxpayers would be on the hook for whatever shortfall there would be. In the case of the gas refinery explosion at Phillips, Texas, the loss of the town's economic base was devastating to its residents. The loss to Kalama and its surroundings would be indescribably worse, possibly on the order of the recent explosions in Beirut, Lebanon. I feel sure I would feel such an explosion at Kalama here in Vancouver. Please, please deny the Shoreline Permit.

This testimony is dedicated to the memory of William Brake.