It is impossible to talk about locating a Liquefied Natural Gas plant in the midst of a residential community without talking about the hazardous properties of LNG. LNG is extremely cold and its release can cause structural failure in nearby tanks, vessels and supporting structures. The extreme temperatures of LNG can cause severe injuries and death.

LNG is easily ignited by heat, sparks, and flame, and its ignition results in extremely high temperature fires. Its vapors become extremely explosive when they come into contact with the air. Although LNG is lighter than air at normal temperatures, when it transitions from liquid to a gas, the vapor cloud is extremely cold and initially heavier than the surrounding air. Vapors can accumulate in storm sewers and other low-lying areas and travel until they find an ignition source. Even in situations when there has been no ignition source, there have been situations like the one in Indonesia in 1993 where LNG enters a storm drain system and undergoes rapid vapor expansion, resulting in extensive property damage from the resulting explosive expansion of gas. LNG containers may explode when heated and ruptured cylinders become missiles threatening neighboring communities.

To give you an idea of just how significant the LNG threat is in our communities, we only need to review the evacuation zone requirements developed by the Department of Transportation in its Emergency Response Guidebook in 2004 for LNG emergencies involving rail cars. The immediate evacuation zone for a large spill on a rail car is ½ mile downwind. The evacuation zone for a fire involving a tank car is one mile in all directions. Compare the recommended evacuation zones to the zones that would be needed to address a breach at the Sparrows Point facility. Rail cars hold a maximum of 33,000 gallons of LNG. The three tanks proposed at Sparrows Point will hold a total of 94.5 million gallons of LNG. Should this facility be located in the midst of a residential community? The answer is crystal clear, and we know the answer to the question!

Let me close with a few final reminders:

- Accidental spills will pose a risk to individuals within ½ mile of the spill.
- A medium to large spill (5-7 square yard breach) will cause a risk to people within one mile.
- A large-scale release will have a cascade effect because of the effects of a cryogenic liquid on the surrounding tank structures and vessels. This would involve a large fire or fireball, cause extensive property damage, and place people more than one mile away at risk.
These risks do not even take into account the land-based part of the operation including three large storage tanks, processing equipment to boil off the LNG into vapor, and a compression system to pressurize the gas for transportation through a high-pressure pipeline to Pennsylvania.

In summary, I would like to add that as Fire Chief I have been asked repeatedly what would the fire department need to be adequately prepared to respond to a disaster at an LNG plant. The response to that question is very straightforward: there is no way to prepare for that kind of disaster, and if we believe there is, we are simply fooling our citizens and ourselves. I ask that this proposal be halted immediately out of the respect for the safety and well being of the citizens of eastern Baltimore County. Thank you.