Blue Ridge Environmental Defense League
www.BREDL.org PO Box 88 Glendale Springs, North Carolina 28629 BREDL@skybest.com (336) 982-2691

July 20, 2017

Audra Dickson, Industrial Permitting Manager
Georgia Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr. Drive
Suite 1456, East Tower
Atlanta, GA 30334
EPDcomments@dnr.ga.gov

RE: NPDES Permit No. GA0050254, Elba Liquefaction Company, Chatham County
Public Notice No. 2017–11 ML

Dear Ms. Dickson:

On behalf of the Blue Ridge Environmental Defense League and our members in Georgia, I write to provide comments on the Elba Liquefaction Company permit.

Background

The National Pollutant Discharge Elimination System (NPDES) permit requested by Elba Liquefaction Company is for their existing liquefied natural gas plant. The plant is located just off of East President Street/Island Parkway, just a few miles from downtown Savannah and 800 yards from Whitney Elementary School. (See map on page 2.)

If re-issued by Georgia EPD, the permit would allow 5,840,000 gallons of demineralization concentrate, nitrogen plant condensate and air compressor condensate annually (at the draft permit level of 0.016 MGD). The discharge would flow into the South Channel of the Savannah River.

General Comments

Liquefied natural gas plants present hazards to water quality and public safety. LNG is predominantly methane (CH_4) with some ethane (C_2H_6) which has been cooled to minus 260 degrees-F, changing the gas to a liquid, a cryogenic process. The volume of LNG is about 1/600th the volume of natural gas in the gaseous state.[1] The liquefaction process also includes removal of contaminants including mercury, hydrogen sulfide, helium, water, dirt, and heavy hydrocarbons (C7+).

LNG hazards include entrainment and impingement of aquatic organisms from cooling water, flammability after re-vaporization into a gaseous state, thermal discharges of water used in regasification and freezing.

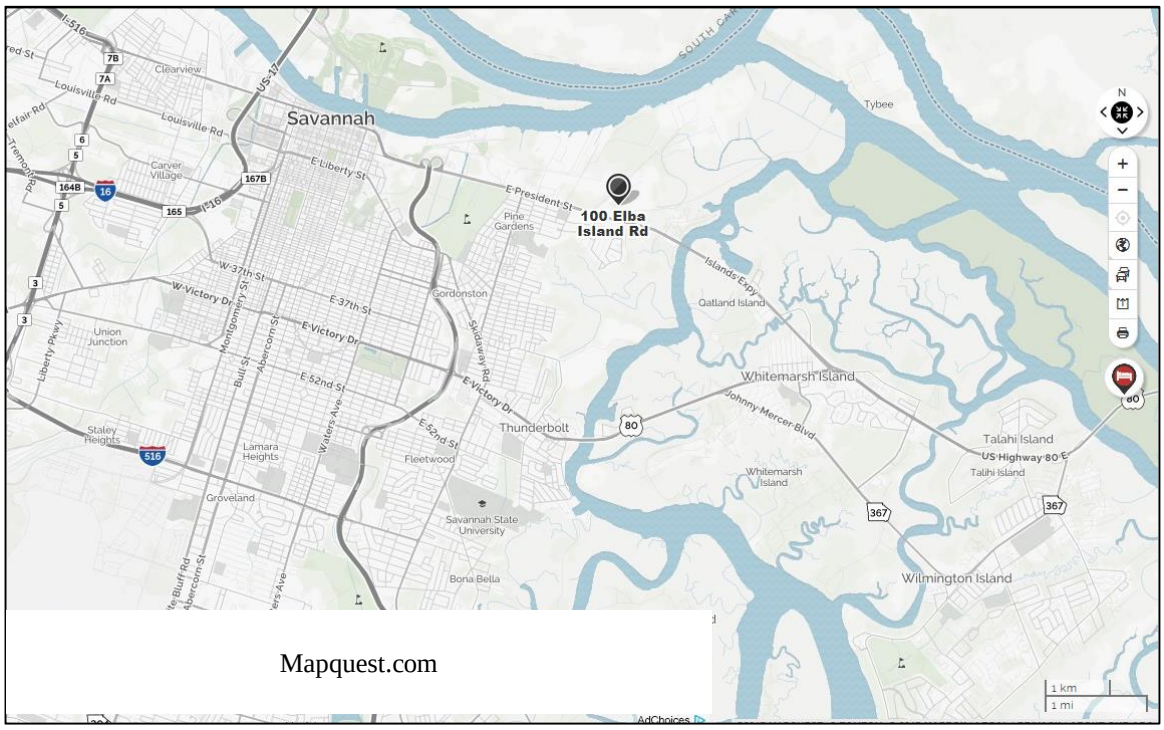
[1] *Handbook of Natural Gas-Transmission and Processing*, 2nd Ed., Mokhatab S. and Poe W, ISBN 978-0-12-386914-2, (2012)

The risk of explosion at an LNG facility extends to great distances:

> If there were to be a leak or spill from an LNG tanker or liquid storage facility, the LNG would convert to a gas. As it diluted with air, the natural gas/air mixture would become potentially explosive when the concentration of natural gas in air reached between 3.8% and 17%. In this concentration range, any source of ignition (cell phone, cigarette lighter, attic fan, light switch, auto or boat engine spark plug, carpet spark, etc.) could ignite the vapor cloud and impact an area that could extend for several miles in diameter.[2]

In 2004, an explosion at a natural gas liquefaction plant killed 27 people, injured many more and caused damages of about $900 million.[3]

Map of the Vicinity of the Elba Liquefaction Company



Specific Comments

The principal goal of the federal Clean Water Act is the elimination of toxic discharges to waters of the United States. Federal standards for water quality provide the basis for the State of Georgia Water Quality Act, OCGA 12-5-20.

The Clean Water Act requires states to meet water quality and anti-degradation standards.

[2] Surfrider Foundation, accessed 7/19/17 at http://beachapedia.org/LNG_(Liquified_Natural_Gas)
[3] Explosion at Sonatrach LNG liquefaction facility, Jan. 19, 2004, accessed 7/19/2017 at https://en.wikipedia.org/wiki/Liquefied_natural_gas

The Act lists mercury as one of 65 Toxic Pollutants to be monitored and controlled.[4] Priority Pollutants are regulated chemicals for which US EPA has developed analytical test methods. The list also includes mercury.[5] Yet no mercury monitoring, recordkeeping or controls are included in the draft permit.

Thermal discharges are regulated under the CWA. Potential thermal discharges of heated water may result from the Elba Liquefaction plant regasification and cryogenic operations. Yet no thermal discharge monitoring, recordkeeping or controls are included in the draft permit.

The overall goal of the Clean Water Act is the improvement of water quality, not just maintenance of the status quo. Yet the draft permit requires nothing beyond best management practices, which fall far short of BAT (best available technology).

Conclusion

The EPDôs permitting of the annual discharge of over five million gallons of liquid demineralization concentrate, nitrogen plant condensate and air compressor condensate plus mercury and other toxic pollutants does not meet anti-degradation policy or promote improved water quality in the Savannah River. The EPD must reject the draft permit and include pollution monitoring, recordkeeping and control which meet federal standards.

Finally, the location of an LNG plant in close proximity to a city of 145,000 people and an elementary school indicates appalling judgement on the part of both the company in locating at the site and the state in permitting the facility.

Thank you for your consideration of these comments.

Respectfully,

Louis A. Zeller, Executive Director

[4] See CWA §307(a)(1); 33 U.S.C. 1317(a)(1); 40 CFR 401.15.
[5] See 40 CFR Part 423, Appendix A