## 1. Project Summary

Spectrum Alaska, LLC is wholly owned by Spectrum LNG, LLC. Its purpose is to construct, own and operate a liquefied natural gas (LNG) production plant on the North Slope. This plant will provide LNG for use in any market that chooses to convert. Drilling rigs, mines, trucks, power plants, small gas distribution systems, are all potential users. Virtually anything that uses diesel can be converted to use LNG. Further, LNG can be easily converted to CNG which is becoming a very popular motor fuel for smaller vehicles.

A site within the Prudhoe Bay Unit, just south of Flow Station #3 has been selected for the LNG plant. The State of Alaska owns the land and Spectrum has filed a lease application (including Right-of-Way) with the State Pipeline Coordinator's Office, a division of the Department of Natural Resources. Spectrum has also filed an application with the Regulatory Commission of Alaska for a Common Carrier Certificate for its short gas supply pipeline.

Numerous other permits are needed and are being or will be applied for in a timely manner.

Plant site selection was based on several criteria. Proximity to market and gas supply, and safe distances from neighbors are some of the key considerations.

The schedule is to lay gravel in the summer of 2013 and construct phase one of the plant in either the Fall of 2013 or the Spring/Summer of 2014. Aside from the field erected camp, shop, and control room, the majority of the processing equipment will be pre-assembled in truckable modules. Some of the processing equipment has already been purchased. The build out schedule will be market driven, as demand increases, additions will be made to the plant to accommodate the demand.

Small scale LNG is now growing into a large scale business. This growth is driven by the large price differential between natural gas and distillate fuels worldwide. Alaska's North Slope has an even greater price differential due to the added cost of diesel transportation. While the Lower 48 states may see \$4 diesel, Prudhoe Bay prices are currently in excess of \$5.50/gallon. Couple this diesel price with an ample supply of stranded gas, and sufficient motivation for LNG development exists.

LNG can be substituted for diesel fuel in many applications. LNG works well in locomotives, drilling rigs, mining trucks, power generation, heavy trucks and off pipeline distribution. Today, LNG is being used in all of these applications. Since the economic

POA-2012-875, Prudhoe Bay Spectrum Alaska LLC Drawings dated March 8, 2013 Sheet 1 of 8 driver is the price differential, the larger the user of fuel, the greater the benefit from converting that user to LNG.

Replacement of diesel fuel with LNG offers tremendous environmental benefits. Use of LNG instead of diesel lowers nitrogen oxides emissions by nearly 20% and carbon monoxide emissions by about 50%. In addition greenhouse gas emissions are reduced by about 6%, including a 20% reduction in carbon dioxide.











