## Department of Natural Resources Use and Availability of 48-inch Pipe in North America October 31, 2015

Pipeline with a 48-inch diameter is used frequently all over the world. It is a proven technology and procurement and construction have been done many times for both gas and oil in North America for over 40 years.

- As part of the 48-inch pipe engineering study underway by the AKLNG Project, 48-inch pipe was ordered (5 or 6 miles) for material testing and is on its way.
- The Project has found only one mill in the US that can make the 42-inch pipe in the wall thickness desired.
- No project of this size would ever single source this much pipe from one mill because one mill probably can't produce that amount in the time frame needed. It would present a huge risk factor for an entire project schedule to rely upon a single source.
- The availability of 48-inch pipe is probably no more of an issue than the heavy wall 42-inch pipe.
- Advanced, cold weather specification have been developed and successfully used on numerous TransCanada projects in Canada.
- From recent data gathered on emerging LNG projects in British Columbia, it appears all of these projects are being designed with 48-inch diameter pipe.
- Following is a list of **existing** 48-inch gas pipelines in North America:
  - TransCanada Canadian Mainline 8,770 miles
  - o TransCanada NGTL Mainline Expansions 20 30 mile increments
  - Net Midstream Mexico Pipeline 120 miles
  - Williams/Transco South Coast Loop 4.8 miles
  - Williams/Spectra Gulfstream Pipeline 210 miles
  - North Baja Pipeline Expansion 80 miles
  - Los Ramos Pipeline System 1,021 miles
  - Union Gas Dawn to Parkway Corridor 257 miles
- Following is a list of **planned** 48-inch gas pipelines in North America:
  - o TransCanada Merrick Mainline Pipeline 161 miles
  - TransCanada Coastal Gaslink Pipeline 415 miles
  - TransCanada Prince Rupert Transmission 559 miles

- Spectra/BG Group Western Connector- 528 miles
- o Cheniere Corpus Christi Pipeline 23 miles
- Existing and proposed 48-inch oil and gas pipelines outside of North America:
  - o Abu Dhabi Crude Oil Pipeline 424 km
  - o Haute De France II Gas Pipeline 174 km
  - o Maghreb-Europe Gas Pipeline 1,306 km
  - o Nord Stream Pipeline System 1,224 km
  - o Dutch Germany North South Pipeline 484 km
  - o India East West Gas Pipeline 1,400 km
  - o China's Second West East Gas Pipeline 8,700 km
  - o Trans Adriatic 760 km
  - o South Caucasus Pipeline Expansion 490 km
- Major North American Pipe Mills with 48-inch capability
  - o Berg Steel Pipe
  - o TMK
  - o EVRAZ
  - JSW Steel
  - Stupp Corporation
  - Jindal Tubulars
- North American pipe mills are likely to struggle to be competitive with Japanese,
   Korean, and Indian mills due to their higher costs
- Trans Alaska Pipeline System, built almost 40 years ago across Alaska is 48-inch pipe