Head Office
4910-53 Street
P.O. Box 1777
Yellowknife, NT
Canada X1A 2P4
Tel: (867) 920-2882
Fax: (867) 920-4319
Email: fscyk@fsc.ca
Web: www.fsc.ca

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FSC Project #: 2005-0480
May 19, 2005

KIA Lands,
P.O. Box 360,
Kugluktuk, NU
X0B 0E0

Attention: Jack Kaniak

Re: Comments for AST Containment Miramar Hope Bay

Dear Jack,

Comments for Miramar Hope Bay
Aboveground Storage Tank Containment Design

General Comments:

- Neither Biogenie S.R.D.C Inc., nor the persons who prepared the design are not registered with the Association of Engineers, Geologists and Geophysicists of the Northwest Territories and Nunavut (NAPEGG) and, therefore, are not licensed to practice engineering in the Northwest Territories or Nunavut.

- The Alberta Guideline of the Alberta Energy & Utilities Board Guide 55 – Storage Requirements for the Upstream Petroleum Industry (Dec 2001) do not have jurisdiction in this region. CCME Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products, 2003 should be used for the design of these tank farms. Regardless, the Alberta guideline for volumetric capacity did not appear to be followed consistently.

- There are only design drawings for Windy Lake Camp and Patch Lake Camp

- Information is vague and does not contain enough detail to carry out a rigorous assessment of the design.

- Specifications for granular construction materials are not provided.

- The potential for permafrost degradation does not appear to have been considered in the design.

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- The diagrams do not indicate that the liner will be keyed into the berm. Some of the stated granular materials are questionable. The liner manufacturers installation instructions should be followed.

- There is no provision made for future growth, size of the enclosures do not provide for any future growth

- What will be the method of removing/remediating (if necessary) vacant enclosures?

Boston Camp

- There is no design drawing provided for this option.

- Waste rock is not a suitable material to place a liner on, or pad a liner with. Punctures are likely especially when looking at the large weight being borne on the liner. Sand or soil is necessary to line the liner to prevent punctures.

- Based on the G 55 guidelines and CCME the containment volume of the dyke should be 110% or 77,000 L not 70,000 L as stated.

Windy Lake Camp:

- Design Drawing is either mislabeled (and should be for Boston camp), or there should be two more 70,000 L tanks and drum area does not appear to be sufficiently large enough to hold 800 barrels.

- Required containment volume according to Guide 55 and CCME is 77,000 L not 70,000 L

- More information required on the properties of the native sand and whether it is suitable for the purpose.

- Not enough information on construction methods, packing and equipment use are provided.

- No information on how they will move existing tanks to complete the new enclosure at the same location as the tanks are currently.

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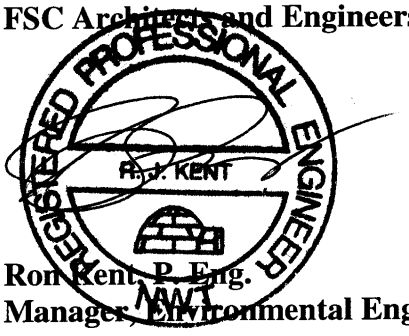
- Appears from the diagram that AST are within 30 metres of shoreline? It should be ensured that a 30 metre setback is provided.

Patch Lake Camp

- No location determined yet.
- More information is required on the type of sand/soil to be used in the dykes.

Should you have any questions regarding these comments please do not hesitate to call.

Yours truly,
FSC Architects and Engineers



Ron Kent, P. Eng.
Manager, Environmental Engineering