

February 1, 2013

Angela Love
Regulatory Specialist
Sahtu Land and Water Board
Box 1, Fort Good Hope
Northwest Territories
XOE 0H0

Dear Ms. Love,

**Re: Husky Oil Operations Ltd.
Land Use Permit – S12X-006
Surface and Groundwater Monitoring Plan Review
Request for Review and Comments**

The Department of Environment and Natural Resources (ENR) has reviewed the above noted Plan based on its mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act* and the *Wildlife Act* and provides the following comments and recommendations for consideration by the Board.

Topic: Surface and Groundwater Monitoring Plan

Comment(s):

ENR would like confirmation that surface and groundwater mapping and monitoring information will be integrated into future drilling projects. Groundwater mapping and monitoring information gathered from this project should be integrated into regional baseline information gathering and assessment, in a coordinated and integrated manner.

Recommendations:

- 1) ENR recommends that all groundwater mapping and monitoring information, including laboratory test results, be included in the Annual Reporting requirement of the Water Licence to prove that ground and surface water resources, that may

be negatively affected by the project activities, have not been contaminated as a result of project activities.

- 2) ENR also recommends monitoring of surface and groundwater in the vicinity of the well sites, or areas of project influence, for at least the duration of the Water Licence and for an extended period if the groundwater samples are found to be contaminated by project activities.
- 3) ENR highly recommends that Husky Oil Operations Ltd. meets with local communities and regional authorities to present all plans for surface and groundwater monitoring and mapping.

Topic: Regional Surface and Groundwater Monitoring and Mapping

Comment(s):

In the absence of existing programs, or regional studies, it is recommended that the proponent work with government, regulators, and other developers operating in the region, to scope, design, develop and implement regional groundwater monitoring programs which should include, but are not limited to, the following points:

Recommendation(s):

- 1) The extent and intensity of the groundwater monitoring program shall reflect good judgment and sound scientific analysis.
- 2) Where feasible, collaboration between government and operators in geographically similar regions is highly recommended. This is intended to improve efficiency and expand monitoring program scope to enhance understanding of groundwater quantity and quality at a broader scale.
- 3) The presence or absence of free natural gas in the water. If appropriate, gas in water analyses should include isotopic fingerprinting.
- 4) Each monitoring well will be instrumented with a dedicated data-logger or some other means for periodic water level monitoring.
- 5) Baseline surface and groundwater monitoring and testing programs must be designed and carried out under the direction of qualified surface groundwater monitoring professionals.
- 6) All monitoring, purging, sampling methods and testing equipment must be selected based on the parameters being monitored and be consistent with established protocols for testing, sampling and analyzing groundwater.

Should you have any questions or concerns, please do not hesitate to contact Patrick Clancy, Environmental Regulatory Analyst at 920-6118 or patrick_clancy@gov.nt.ca.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Clancy', written in a cursive style.

Patrick Clancy
Environmental Regulatory Analyst
Environmental Assessment and Monitoring
Land and Water Division
Environment and Natural Resources
Government of the Northwest Territories