

March 31, 2009 9021-2600-32640-02

Corey Higham
Business Development
Secure Energy Services Inc.
1201, 333 – 7<sup>th</sup> Avenue S.W.
Calgary, AB T2P 2Z1

Dear Mr. Higham:

RE: APPLICATION FOR APPROVAL OF DEEP WELL DISPOSAL
OF NON-HAZARDOUS WASTE AND PRODUCED SALT WATER
SECURE HERITAGE A11-4-79-14 W6M (WA# 24497); BLUESKY FORMATION

An initial application for disposal into the subject well, dated September 17, 2008, resulted in an OGC water injectivity test approval for multiple zones dated October 16, 2008. Test results indicate that the Baldonnel zone is not suited for commercial disposal, however a successful injection test was conducted on the Bluesky formation. The conditions of the injectivty test approval were met, with no hydrocarbons evident.

This application addresses a need in the area for disposal of non-hazardous waste liquids. We concur that the subject well appears to be a good candidate for non-hazardous waste and salt water disposal in the Bluesky formation. Notice of your application was posted on the OGC website, with no written objections received.

Attached please find Approval 09-02-001 for the application granted under Part 8, Division 3, Section 94 of the *Drilling and Production Regulation*, for the Bluesky. The form Notice of Commencement or Suspension of Operations (BC-11) must be submitted upon injection operation.

The Cretaceous formation fracture gradient is anomalously high in this area. Condition #4 stipulates the maximum wellhead injection pressure, which includes a safety factor. Monitoring is required to ensure this value is not exceeded and that continued operation at this pressure is not having adverse impacts.

The Commission identifies the type of effluent approved for injection (and maximum rate of injection) in a separate Permit. The effective date of this approval is the date of issuance of the Waste Discharge Permit, granted under the <a href="Environmental Management Act">Environmental Management Act</a>.

Sincerely,

Richard Slocomb, P.Eng.

Supervisor, Reservoir Engineering

Attachment

cc: Devin Scheck, Director - Waste Management, OGC

## **APPROVAL 09-02-001**

## THE PROVINCE OF BRITISH COLUMBIA PETROLEUM AND NATURAL GAS ACT DRILLING AND PRODUCTION REGULATION OIL AND GAS COMMISSION

IN THE MATTER of a scheme of Secure Energy Services Inc. (Secure) for Salt Water and Non-Hazardous Waste (SW/NHW) disposal into the Bluesky formation in the well Secure Heritage A11-4-79-14 W6M (WA# 24497).

NOW, THEREFORE, pursuant to Part 8, Division 3, Section 94 of the *Drilling and Production Regulation*, the SW/NHW disposal scheme is hereby approved, as such scheme is described in

an application from Secure to the Commission dated September 17 and December 8, 2008 and related submissions.

- 1. The salt water and non-hazardous waste disposal interval must be in the Bluesky.
- A record of volume of SW/NHW disposed of through this well must be included on a Monthly Injection/Disposal Statement, in the prescribed form (BC-S18), which must be submitted to the Oil and Gas Commission not later than the 25th day of the month following the reported month.
- The disposal of non-hazardous waste must be in accordance with the approval conditions of a Waste Discharge Permit, issued under the <u>Environmental</u> <u>Management Act</u>.
- 4. The disposal/injection pressure at the sandface must not exceed the formation fracture pressure, with the maximum wellhead injection pressure not to exceed 19,150 kPa.
- 5. This approval may be modified or rescinded if deemed appropriate through a change in circumstances.

Richard Slocomb

Supervisor, Reservoir Engineering

Resource Conservation

Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 31<sup>st</sup> day of March 2009.