



Manitoba Petroleum Branch
Box 1359 – 227 King Street
Virден, MB R0M 2C0

January 21, 2010

Attention: Jennifer Abel

Re: T. Bird Oil Ltd Kirkella 08-16-11-29W1 Battery Application

Enclosed, please find the required documentation as per Section 75(1) of the Drilling and Production Regulations.

If you have any questions or concerns regarding this application please contact Bruce Dunning (204)851-5822 or bdunning@mts.net.

1. Application Fee and Levy

A cheque in the amount of \$500.00 payable to the Minister of Finance will be submitted under separate cover.

2. Performance Deposit

As per Paulette Seymour an additional performance deposit will not be required to obtain this battery operating permit.

3. Survey Plan

A digital copy of the survey plan of the battery location is attached.

4. Landowners and Occupants

A list of landowners and occupants within 1.5km of the proposed battery location and a sample consultation letter are attached. A summary of the consultations will be submitted upon completion of the process.

5. Wells to be tied in

The following wells will be tied-in to the proposed battery at 08-16-011-29:

- 01-16-11-29
- 02-16-11-29
- 06-16-11-29
- 08-16-11-29
- 09-16-11-29
- 04-21-11-29
- 08-21-11-29
- 16-21-11-29
- 03-16/03-09-11-29 HZNTL



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6. Anticipated Production Rates

The anticipated flow rates entering the 08-16-011-29 battery are:

Oil: 50 m³/d

Water: 80 m³/d

Gas: 150 m³/d. All gas will be vented.

7. Gas Analysis

A digital copy of a representative gas analysis is included.

8. Process Vessels

There will not be any process vessels used at this battery. The battery will consist of an inlet header, storage tanks, recycle pump and saltwater disposal pump.

9. Well Testing

Each well will be tested via shut-in or test satellite and in compliance with The Drilling and Production Regulation.

10. Flare and Vapour Recovery

There will not be any flare or vapour recovery system in place at the battery.

11. Venting

All gas produced to the site will be vented directly from the 6m high storage tank vents. Dispersion modelling indicates that vented volumes and concentrations fall well within the Provincial Air Quality Guidelines.

12. Air Dispersion Modeling

Air dispersion modeling results are attached. At the production rate of 50 m³/d with a GOR of 3.0 m³/m³, an H₂S concentration of 0.05%, a stack diameter of 0.1m and a stack height of 6m, the maximum 1 hour concentration of H₂S is 5.22µg/m³ at 52.0m. This meets the requirements of subsection 85.2(1) of the Manitoba Drilling and Production Regulation.

13. Plot Plan/Flow Diagram

A digital copy of the plot/flow schematic is attached.

14. Water Disposal

The produced water will be disposed of at a third party facility until future conversion of 07-16-11-29 SWD and installation of associated infrastructure.