



November 2, 2010

2150-4060-59240-16

Maren Sears, EIT  
Talisman Energy Inc.  
Suite 2000, 888-3<sup>rd</sup> St. S.W.  
Calgary, AB T2P 5C5

Dear Ms. Sears:

**RE: ACID GAS DISPOSAL ORDER  
TALISMAN ET AL BRAZION a-88-H/93-O-08; WA# 8496  
BRAZION – PARDONET-BALDONNEL “B” GAS POOL**

Commission staff have reviewed your application, dated December 24, 2009, requesting approval to dispose of acid gas into the Pardonet and Baldonnel Formations of the subject well.

As part of the application process a notice of application for acid gas disposal was posted to the OGC website on January 25, 2010, with February 15, 2010 being the last day to file an objection. Imperial Oil Resources submitted an objection identifying concerns with potential acid gas migration and liability associated with their suspended wellbore located at d-10-I/93-O-8 (WA# 8823). Upon further communications between Talisman and Imperial Oil, Imperial removed their objection to the acid gas disposal application.

Attached please find Order 10-16-003 designating the Brazion – Pardonet-Baldonnel “B” pool a Special Project under section 75 of the *Oil and Gas Activities Act*, for the operation and use of a storage reservoir for the disposal of acid gas.

Please note that, as per section 75 of the *Regulation*, a record of the volume of acid gas disposed of through this well must be included on a Monthly Injection or Disposal Statement (BC-S18), which must be submitted to the Oil and Gas Commission no later than the 25th day of the month in which activity occurred. Also, the operation of the acid gas disposal project will be subject to periodic review and the Commission may modify the Order, if deemed appropriate.

Should you have any questions, please contact Richard Slocomb at (250) 419-4421.

Sincerely,

A handwritten signature in black ink, appearing to read "Alex Ferguson", is written over a horizontal line.

Alex Ferguson  
Commissioner  
Oil and Gas Commission

Attachments

Cc Harvey Heinrichs, P.Eng. - Canadian Chemical Technology Inc.  
Ines Piccinino, Executive Director, Oil and Gas Division – Ministry of Energy

IN THE MATTER of the application from Talisman Energy Inc. (Talisman) to the Commission dated December 24, 2009 for the operation and use of a storage reservoir.

**ORDER 10-16-003**

- 1 Under Section 75(1)(d) of the *Oil and Gas Activities Act*, the Commission designates the Brazion – Pardonet-Baldonnel “B” pool within the area described in the attached schedule as a special project for the operation and use of a storage reservoir for the disposal of acid gas.
- 2 Under section 75(2) of the *Oil and Gas Activities Act*, the special project designation in this Order is subject to the following conditions:
  - a) Acid gas shall be injected only into the Pardonet-Baldonnel formation (2071.0 – 2265.0 mKB) through the well a-88-H/93-O-8 (WA# 8496).
  - b) The wellhead injection pressure must be continually measured and recorded, and must not exceed 10,000 kPag.
  - c) The injection rate must not exceed  $900 \text{ } 10^3 \text{ m}^3/\text{d}$  expressed at 101.325 kPaa and 15 degrees Celsius.
  - d) The cumulative volume injected must not exceed  $3395.0 \text{ } 10^6 \text{ m}^3$  expressed at 101.325 kPaa and 15 degrees Celsius.
  - e) The Permit Holder must monitor the casing-tubing annulus pressure.
  - f) The Permit Holder must maintain hydraulic isolation of the injection zone.
  - g) The Permit Holder must conduct a reservoir pressure (fall-off) test of the Pardonet-Baldonnel formation in the subject well, with a shut-in period of not less than 5 days, during scheduled plant shutdowns.
  - h) The Permit Holder must conduct a program for monitoring bottom hole reservoir pressure changes in the Pardonet-Baldonnel formation through the observation well located at a-11-J/93-O-8 (WA# 8895), on a schedule that does not exceed 2 years between tests. Wellhead pressures must be obtained from the a-11-J well on a quarterly basis.
  - i) A barricade must be installed around the wellhead that is capable of withstanding vehicle collision.
  - j) All injection operations must be immediately suspended if any injection equipment, monitoring equipment or safety devices considered necessary for safe operation should fail.
  - k) The permit holder must submit a progress report to the Commission for each six month period the project is in operation, determined from the first day of injection noted in (l). The progress report must be filed within 60 days after the end of each period and must contain the following :
    - i) details of any workover or treatment program done on the well with reasons for the workover and results of the workover,
    - ii) a discussion of any changes in injection equipment and operations,
    - iii) a general review of the operation of the project including identification of problems, remedial action taken and results of the remedial action on project performance,

- iv) a discussion of the overall performance of the project,
  - v) an evaluation of all monitoring done during the reporting period including corrosion protection, fluid analyses, logs and any other data collected,
  - vi) a table showing monthly volumes of injected fluid, corresponding maximum wellhead injection pressures and calculated bottomhole pressures, maximum daily injection rates, average wellhead temperatures and hours on injection,
  - vii) the volume-weighted average composition and formation volume factor for the injected fluid,
  - viii) a plot showing monthly injection volume and average pressure versus time on an ongoing basis,
  - ix) a table showing tonnes of sulphur and carbon dioxide disposed on a monthly and cumulative basis.
- l) The Project shall be deemed to have commenced upon initiation of acid gas injection into the well. The Supervisor, Reservoir Engineering, Resource Conservation, must be notified in writing within 72 hours of commencement of injection operations.



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Alex Ferguson  
Commissioner  
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 2<sup>nd</sup> day of November 2010.

SCHEDULE, Order 10-16-003

093-O-8    Block G – unit 91  
              Block H – units 78, 79, 88, 89, 98-100  
              Block I – units 8-10, 20, 30  
              Block J – units 1, 11-13, 21-23, 32, 33, 42, and 43.