BC Oil & Gas COMMISSION

April 27, 2009 8110-4060-59240-16

Corey Sterling, P.Eng.
Team Leader – Monkman Development
Talisman Energy Canada
3400, 888 – 3rd St. SW
Calgary, AB T2P 5C5

Dear Mr. Sterling:

RE: ACID GAS INJECTION APPROVAL; AMENDMENT #2
TALISMAN SUKUNKA a-43-B/93-P-5; WA #1517
SUKUNKA PARDONET-BALDONNEL "J' POOL

This refers to your application dated October 27, 2008 wherein you requested an amendment to the acid gas injection approval for the subject well.

The subject well was originally approved for acid gas disposal on March 21, 2002 and subsequently amended on December 12, 2005. The original approval set a maximum cumulative injection volume of 1330 10^6 m^3, which represented the total amount of natural gas produced from the subject pool.

Talisman Energy has requested an increase in the maximum cumulative injection volume, on the basis that acid gas has a smaller formation volume factor when compared with natural gas. Therefore more acid gas can be accommodated in the reservoir without exceeding the maximum wellhead injection pressure limitation or the original pool pressure.

The Commission agrees that an increase in cumulative injection volume is warranted. Attached please find Approval 02-16-001 (Amendment #2) for the application granted under Section 100 of the Petroleum and Natural Gas Act.

In making their application, Talisman also provided a copy of their annual progress report for the subject disposal operation which showed possible contamination of an adjacent pool. The well b-19-A/93-P-05 (WA# 3658), mapped as a separate gas accumulation (Sukunka – Pardonet-Baldonnel "C") was showing signs of increasing H_2S and CO_2. This well has been shut-in due to high H_2S content and it has been estimated that a considerable volume of gas has been stranded. Talisman has committed to continue monitoring reservoir pressure in the b-19-A/ well in an effort to better understand the degree of leakage between pools.

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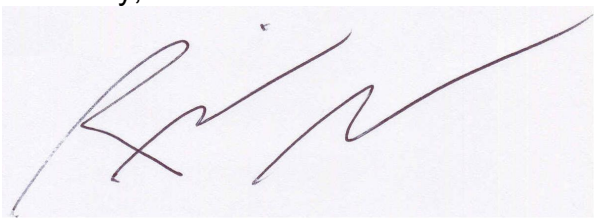
Talisman has indicated a willingness to compensate the Province for the lost royalties and the Commission encourages Talisman to contact the Ministry of Finance and Ministry of Energy, Mines and Petroleum Resources regarding this matter.

Sincerely,



Richard Slocomb, P.Eng.
Supervisor, Reservoir Engineering
Resource Conservation Department

Attachment

Cc Doug Stangeland – Ministry of Finance
Ines Piccinino – MEMPR
Carmine Vertone - MEMPR

APPROVAL 02-16-001 (Amendment #2)

THE PROVINCE OF BRITISH COLUMBIA
PETROLEUM AND NATURAL GAS ACT
OIL AND GAS COMMISSION

IN THE MATTER of a proposal (the Scheme) by Talisman Energy Inc. (the Operator) to inject acid gas into the Pardonet-Baldonnel "J" pool in the well Talisman Sukunka a-43-B/93-P-5 (the well).

NOW THEREFORE, the Commission, pursuant to section 100 of the Petroleum and Natural Gas Act, R.S.B.C. 1996, c.361 hereby orders as follows:

The Scheme of the Operator for the injection of acid gas (hydrogen sulphide and carbon dioxide) into the Pardonet-Baldonnel "J" pool through the well, as such proposal is described in an application from the Operator to the Commission dated January 18, 2002 and supplemented with additional applications dated August 3, 2005, and October 27, 2008 is hereby approved, subject to terms and conditions herein contained.

1. Acid gas shall be injected only into the Pardonet-Baldonnel "J" pool through the well.
2. The area of the Scheme shall consist of units 40 and 50 of Block A and units 12, 13, 22, 23, 31-35, 41-45, 52-55 and 62-65 of Block B/93-P-5.
3. The wellhead injection pressure must not exceed 12,135 kPag.
4. The injection rate must not exceed 1000 $10^3 m^3/d$ expressed at 101.325 kPaa and 15 degrees Celsius.
5. The cumulative volume injected must not exceed 1,900.0 10^6 m^3 expressed at 101.325 kPaa and 15 degrees Celsius.
6. The Operator must monitor the casing, conduct annular packer isolation tests and implement appropriate corrosion protection measures.
7. The Operator must monitor reservoir pressure in the offsetting wells and maintain the hydraulic isolation of the injection zone.
8. The Operator 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 the next scheduled plant shutdown.
9. The Wellhead Emergency Shut-Off Device must be linked to H_2S detector heads at the wellhead and a Subsurface Safety Valve or Injection Check Valve must be installed in the tubing string to operate "fail-safe".
10. A barricade must be installed around the wellhead that is capable of withstanding vehicle collision.
11. All injection operations must be immediately suspended if any injection equipment, monitoring equipment or safety devices considered necessary for safe operation should fail.
12. A record of volume of acid gas 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 (Victoria) not later than the 25th day of the month following the reported month.

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13. The Operator must submit a progress report to the Commission for each six-month period the Scheme is in operation, determined from the first day of injection. The requirement may be amended at the request of the operator after the scheme has been in operation for a period of three years. The progress report is due within 60 days after the end of each period and must contain:

    a) details of any workover or treatment program done on the well with reasons for the workover and results of the workovers,

    b) a discussion of any changes in injection equipment and operations,

    c) 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,

    d) a discussion of the overall performance of the scheme,

    e) an evaluation of all monitoring done during the reporting period including corrosion protection, fluid analyses, logs and any other data collected,

    f) a table showing monthly volumes of injected fluid, corresponding maximum wellhead injection pressures, maximum daily injection rates, average wellhead temperatures and hours on injection,

    g) the volume-weighted average composition and formation volume factor for the injected fluid,

    h) a plot showing monthly injection volume and average pressure versus time on an ongoing basis,

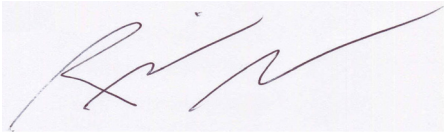
    i) a table showing tonnes of sulphur and carbon dioxide disposed on a monthly and cumulative basis.

14. The Scheme shall be deemed to have commenced upon initiation of acid gas injection into the well. The Manager, Operations Engineering must be notified in writing 72 hours prior to the commencement of injection operations.

15. An Emergency Response Plan procedure must be filed with the Manager, Operations Engineering prior to commencement of the injection operations.

16. The operations of the acid gas injection scheme will be subject to periodic review by the Commission. The Supervisor, Reservoir Engineering or the Director, Drilling and Production, may issue general guidelines regarding the operations of the acid gas injection scheme.

17. The approval or any condition of it may be modified or rescinded for non-compliance of the conditions or unsafe operations.



Richard Slocomb, P.Eng.
Supervisor, Reservoir Engineering
Resource Conservation Department

DATED AT the City of Victoria, in the Province of British Columbia, this 27th day of April 2009.