

Control Wells Q&A's – updated January 28, 2010

Question 1. May a licensee change its CBM pressure and flow control well?

Answer: CBM pressure and flow control well obligations continue for the life of the CBM development that the control well supports. If a pressure and flow control well can no longer be used due to operational problems and there is still CBM production in the area, the licensee of the well must submit an alternative location to be validated by the ERCB for the same coal zones.

Question 2. Is a 14-day buildup sufficient for the pressure data requirement of CBM pressure and flow control wells? Is there a cutoff point to the buildup time for a segregated pressure test of a coal zone?

Answer: CBM pressure and flow control wells must be tested in accordance with Section 5.1 of Directive 040, as described below:

The pressure data collected from coal zones in the pressure and flow control wells should be stabilized. For most purposes, a "stabilized reservoir pressure" is defined as a pressure that does not increase over 2 kPa/hour during a 6-hour period.

The following four methods, in order of preference, are acceptable for obtaining pressures representative of stabilized shut-in reservoir pressures.

- 1) Measure sufficient transient data to reliably extrapolate to a stabilized reservoir pressure (PR). Note that for a flow and buildup test, the shut-in should be four times the flow period.
- 2) Measure pressure buildup until the change in pressure is less than or equal to 2 kPa/hour over a 6-hour period.
- 3) Measure a static pressure after a shut-in sufficient to reach a stabilized pressure, as determined from previous transient data on this well. If previous transient data indicate that a shut-in in excess of 14 days is required to reach a stabilized pressure, the EUB expects the licensee/operator to use the appropriate shut-in. The time required for pressure buildup is inversely proportionate to permeability. In general, whenever a reasonable estimate of the stabilized reservoir pressure can be obtained within a 14-day shut-in period (using buildup or static pressure measurements), the basic pressure requirements apply. A measured or extrapolated pressure that is at least 95 per cent of the fully built-up pressure is considered adequate for most reservoir management.
- 4) Measure a static pressure after a shut-in time of at least 14 days if no transient data are available.

Question 3. May control wells be used by offsetting licensees?

Answer: Yes, if offsetting licensees have control wells in place, the coal zones that you are developing are validated in the control wells, and your wells are within the prescribed radiuses, then the offsetting licensees' control wells may be used to meet the control well requirements.

Question 4. What are the desorption, pressure, and flow data collected from CBM control wells being used for?

Answer: The ERCB calculates reserves on a provincial basis. Therefore, the desorption,

pressure, and flow data collected from CBM control wells are used in statistical analysis and deposit style modeling to establish trends of gas content and recovery factors of coal zones. The ERCB also uses the CBM-only flow data to determine production splits for wells producing commingled from conventional sands, CBM, and other lithologies.

Question 5. What geophysical logs would the ERCB prefer be collected on potential control wells?

Answer: The ERCB would prefer that an open-hole neutron density porosity log with gamma ray and a resistivity log be collected on potential control wells.

Question 6. What is a licensee required to do if a pressure and flow control well is depleted and abandoned?

Answer: Data from a control well that has been depleted are useful to the ERCB. The operator of the pressure and flow control well will need to collect a final set of pressure tests and flow metre logs prior to abandoning the control well. If CBM development is active or ongoing in the area, a replacement control well must be validated prior to abandoning the original control well.

Question 7. May CBM pressure and flow control wells be standing for a time within the first year of production if the well(s) are not tied in for production?

Answer: The requirement for pressure and flow control wells is that they must commence production within 4 months designation and must remain on production for the majority of the time. Well downtimes for servicing or plant turnaround are acceptable.

Question 8. Will the pressure and flow control well annual testing requirements be listed on the ERCB annual pressure survey schedule?

Answer: The ERCB anticipates control well pressure testing schedules to be incorporated onto the existing Web page Well Testing – Pressure Survey Schedule by early 2010.

Question 9. If a shallow CBM pool was not initially perforated or tested in a control well, may it be perforated and tested at a later date, since it will still have representative initial pressure?

Answer: The ERCB does not require operators to complete every coal zone present in a well when initially having zones validated for control well status. There may be a staggered validation of zones in a well as companies elect to pursue additional coal zones in an area.

Question 10. May a control well retain confidentiality?

Answer: Designation of a control well results in all data relating to the control well, except desorption reports within the one year confidentiality period, becoming publicly available at the time of designation.

Question 11. How can I get an expansion to the Appendix A: Area Exempt from Additional Desorption Control Well Requirements for Specified Coal Zones?

Answer: There is not an application process to expand the Appendix A area; the ERCB will however proactively consider expansion to the area where appropriate.

Question 12. Do I need to apply for a desorption exception in the area defined under Appendix A of Directive 062?

Answer: No, providing your development is completed deeper than 180 metres below ground level no further application for either desorption control well designation or exception is required. It will still be necessary to obtain desorption control well coverage for coal completions zones above 180 metres where coverage for that zone does not already exist. Control well requirements for pressure and flow control well coverage continue in this area.

Question 13. Can I apply to extend the 30 day flow period for wells producing CBM without control wells coverage.

Answer: No.

Question 14. How do I let the ERCB know that I am using the 30 day flow period for my CBM well?

Answer: The ERCB will be able to determine this through the standard use of a well status change and the production records for the well. That is, a CBM well with a 30 day flow period will show a change in status to 'flow' which is tagged to a specific date. Production records will then show no more than 720 hours of production beginning in the month of the well status change and if required, ending in the subsequent month. If full control well compliance is achieved during the 30 day period, production can continue and the production records will not highlight that a 30 day flow period was used; the ERCB will infer that the 30 day period was used in these cases. Operators should **not use** the 'test; status to report that the well is using the 30 day flow period.

Question 15. Where should requests for desorption reports, disposition documents and additional information from applications be submitted?

Answer: Desorption reports can be obtained by contacting Information Services at infoservices@ercb.ca after the desorption report has become non-confidential. Disposition documents, application forms or any other information provided along with the application can be viewed online through IAR Query for up to 30 days after disposition. After the 30 days, a copy can be obtained by also contacting Information Services.