

Directive 035: Baseline Water Well Testing Requirement for Coalbed Methane Wells Completed Above the Base of Groundwater Protection

May 8, 2006

Effective June 17, 2013, the Energy Resources Conservation Board (ERCB) has been succeeded by the Alberta Energy Regulator (AER).

As part of this succession, the title pages of all existing ERCB directives now carry the new AER logo. However, no other changes have been made to the directives, and they continue to have references to the ERCB. As new editions of the directives are issued, these references will be changed.

Some phone numbers in the directives may no longer be valid. Contact AER Inquiries at 1-855-297-8311 or inquiries@ aer.ca.

Directive 035

May 8, 2006

Baseline Water Well Testing Requirement for Coalbed Methane Wells Completed Above the Base of Groundwater Protection

The Alberta Energy and Utilities Board (EUB/Board) has approved this directive on May 8, 2006.

<original signed by>

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Board Member

1 Introduction

The Alberta Environment (AENV) Standard for Baseline Water Well Testing for Coalbed Methane/Natural Gas in Coal Operations (AENV Standard) is **effective May 1, 2006**. Baseline water well testing is mandatory for companies wanting to drill a new well or complete or recomplete wells for the purpose of producing coalbed methane (CBM) above the base of groundwater protection (BGWP). The test data and analyses are to be submitted to AENV and the landowner/occupant.

The AENV Standard currently only applies to the development of CBM above the BGWP. For clarification, CBM wells are wells completed or recompleted in a coal seam.

The EUB encourages oil and gas companies to continue current practices of collecting baseline water quantity and quality data for water wells in close proximity to any energy development well prior to drilling and to submit these data to AENV.

2 New EUB Requirements

To support implementation and to confirm that applicants and licensees have met the AENV Standard requirements, the EUB is modifying its well licence and recompletion requirements. If audited, companies must provide the required documentation to confirm compliance.

2.1 Well Licensing Under *Directive 056*

2.1.1 CBM Wells above the BGWP Licensed on or after May 1, 2006

CBM wells above the BGWP licensed on or after May 1, 2006, must meet the AENV Standard and the following requirements. These requirements will be incorporated into *Directive 056: Energy Development Applications and Schedules* under Section 7.9: Technical Requirements.

Prior to filing a new well licence application for CBM above the BGWP, an applicant must offer to test any active water wells and observation wells within a 600 metre (m) radius of the proposed CBM well. If no such wells are identified within a 600 m radius, the applicant must offer to test the nearest water well or observation well within a 600 to 800 m radius. In either case, the applicant must document the process in accordance with AENV Standard.

When filing a well licence application, an applicant must attach a cover letter that states its intent to drill a CBM well above the BGWP and that the offer to test water wells and observation wells was made, as required by the AENV Standard. Additionally, the applicant must submit a survey plan or map that shows all active water wells and observation wells locations referred to above. GPS coordinates of active water wells and observation wells are required on maps.

Where offers to test are accepted, an applicant or licensee must test water wells and observation wells in accordance with the AENV Standard prior to drilling the CBM well. The applicant or licensee must provide AENV and landowners/occupants with copies of all the tests and analyses within two months of testing. If the information cannot be provided within two months, the applicant or licensee must advise the landowners/occupants of the reason for the delay.

If selected for audit review, the licensee must submit documentation in accordance with the AENV Standard. As a minimum, this must include documentation demonstrating that offers to test water wells and observation wells occurred prior to the filing of the application by identifying the landowners/occupants, the date contact occurred, the status of the offers, and the agreed-upon timeline for water/observation well testing and the drilling of the CBM well.

2.1.2 CBM Wells above the BGWP Licensed prior to May 1, 2006

Licensees of CBM wells licensed prior to May 1, 2006, and drilled and completed after June 1, 2006, must meet the following requirements:

Prior to drilling a CBM well above the BGWP, the licensee must offer to test any active water wells and observation wells within a 600 m radius of the proposed well. If no such wells are identified within a 600 m radius, the licensee must offer to test the nearest water well or observation well within a 600 to 800 m radius. In either case, the licensee must document the process in accordance with the AENV Standard and prepare a survey or map showing water and observation well locations referred to above. GPS coordinates of active water wells and observation wells are required on maps.

Where offers to test are accepted, a licensee must test water wells and observation wells in accordance with the AENV Standard prior to drilling the CBM well. The licensee must provide AENV and landowners/occupants with copies of all the tests and analyses within two months of testing. If the information cannot be provided within two months, the licensee must advise the landowners/occupants of the reason for the delay.

For CBM wells licensed prior to May 1, 2006, and drilled and completed above the BGWP on or before June 1, 2006, the EUB strongly encourages licensees to meet the AENV Standard.

Clarification of these requirements will be posted on the [Directive 056 Web page](#) on the EUB Web site under “Directive 056 Process Clarification for Baseline Water Well Testing Requirements for Coalbed Methane (CBM) Wells Completed above the BGWP”.

2.2 Completions and Recompletions

For wells licensed and drilled prior to May 1, 2006, and completed or recompleted in a coal seam above the BGWP after June 1, 2006, an application is not required prior to completions or recompletions. Licensees are required to meet the AENV Standard and the applicable *Directive 059: Well Drilling and Completion Data Filing Requirements* data submission requirements. In addition, the licensee must keep and provide the following process documentation if audited:

The licensee must have offered to test any active water wells and observation wells within a 600 m radius of the CBM well. If no such wells were identified within a 600 m radius, the licensee must offer to test the nearest water well or observation well within a 600 to 800 m radius. In either case, the licensee must have documented the process in accordance with the AENV Standard.

Where offers to test are accepted, the licensee must have conducted water well and observation well testing in accordance with the AENV Standard prior to completing or recompleting the CBM well. The licensee must provide AENV and landowners/occupants with copies of all the tests and analyses within two months of testing. If the information cannot be provided within two months, the licensee must advise the landowners/occupants of the reason for the delay.

The licensee must have a survey or map showing water and observation well locations referred to above. GPS coordinates of active water wells and observation wells are required on maps.

For CBM wells licensed prior to May 1, 2006, and drilled and completed or recompleted above the BGWP on or before June 1, 2006, the EUB strongly encourages licensees to meet the AENV Standard.

3 Compliance Assurance

~~Effective June 1, 2006, the EUB will~~

- ~~close any *Directive 056* CBM well licence applications that target completions above the BGWP that do not meet the requirements of this directive.~~
- ~~commence audits to ensure that applicants have met the requirements of this directive and the AENV Standard.~~

~~Effective July 1, 2006, for any noncompliances associated with this directive, the EUB will be initiating enforcement action in accordance with *Directive 019: EUB Compliance Assurance—Enforcement*, available on the EUB Web site.~~

4 Further Information

Please refer to the AENV Web site at <http://www.waterforlife.gov.ab.ca/coal/index.html> to contact AENV with any questions on the AENV Standard and for more details regarding the Standard and any associated documents or updates.

For additional information on the AENV Standard, contact Alberta Environment Education and Information Centre—phone: (780) 427-2700 (toll free by first dialling 310-0000); fax: (780) 422-4086; e-mail: env.infocent@gov.ab.ca.

The EUB will be conducting information sessions to familiarize stakeholders with the implementation of the AENV Standard. Date and registration instructions will be posted on the [Directive 056 Web page](#).

For further information on this directive, contact the following EUB groups and check the EUB Web site for further updates and clarifications:

- Applications Branch, Facilities Applications Group, Directive 056 Help System—Help Line Phone: (403) 297-4369; fax: (403) 297-4117; e-mail: Directive056@gov.ab.ca
- Compliance and Operations Branch, Environment Group—phone: (403) 297-8330; fax: (403) 297 – 2691; e-mail: EUB.EnviroServices@gov.ab.ca