

EUB Gives Conditional Green Light on Sour Gas Wells Outside Calgary

Compton Petroleum Corporation Applications for Licences to Drill Six Critical Sour Natural Gas Wells, Reduced Emergency Planning Zone, Special Well Spacing, and Production Facilities Okotoks Field (Southeast Calgary Area) (22 June 2001), Decision 2005-060 (Alberta Energy and Utilities Board) Applications 127857, 1276858, 1276859, 1276860, 1307759, 1307760, 1278265, and 1310361.

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In a decision released on June 22, 2005, the Alberta Energy and Utilities Board (the "EUB" or "Board") considered applications by Compton Petroleum Corporation ("Compton") to drill six critical sour gas wells along the southeast edge of the city of Calgary, and to reduce the emergency planning zone ("EPZ") associated with those wells. The EUB found that four wells could be drilled safely, but refused to issue well licenses until Compton revised and resubmitted an emergency response plan for a EPZ in accordance with the Board's directions. Although the well licenses have not yet been issued, the question remains whether this decision sets a precedent for developing sour gas wells near densely populated urban centres.

Background

Compton's applications raised many concerns due to the high hydrogen sulphide (H₂S) content of the proposed wells¹ and its plans to reduce the EPZ associated with those wells. The wells would be located about 4.5 kilometres ("km") from the nearest communities in Calgary, and 1.1 km from the city limits. Given the proximity of the proposed wells to existing rural residences, the city of Calgary and to several other communities, a total of 21 interventions were received from resident groups, adjacent landowners, municipal authorities, health authorities, and corporations holding land interests in the area expressing concerns about the proposed wells.²

Emergency planning

The decision whether to grant the well licenses was contingent upon the adequacy of Compton's emergency plans. Before a sour gas well is drilled, the EUB requires an applicant to submit a site-specific emergency response plan. This demonstrates how the applicant will ensure public safety in the event of an uncontrolled release of H₂S. The plan is developed according to a calculated EPZ using a formula based on the maximum H₂S release rate of the well. For Compton's well applications, the calculated EPZ radius was 11.94 km during the drilling phase and 14.97 km during the completion phase. It was estimated that more than 250,000 people lived and worked within the calculated 14.97 km EPZ.

Compton applied to reduce the EPZ to 4 km for both the drilling and completion operations. The reason for this application was that Compton had committed to ignite a

well release within 15 minutes³ and that it would be difficult or impractical to evacuate such a large number of people in a short timeframe.

The EUB denied Compton's application for the reduced EPZ, finding that it was not sufficiently protective of public safety. The Board also found that Compton's emergency response plan for the reduced 4 km EPZ "lacked sufficient detail and was deficient."⁴ Rather than dismissing the application on those grounds, the EUB directed Compton to revise its emergency response plan based on a 9.7 km EPZ (the "revised EPZ"),⁵ comprised of a 5 km mandatory evacuation zone and a 4.7 km sheltering zone. Residents in the sheltering zone would be notified of any emergency but would remain in their homes until the sour gas passed over the area.

In addition to the revised EPZ, the Board directed Compton to incorporate over 20 components into its revised emergency response plan.⁶ Some of the directions included:

- adopting a unified command approach with municipalities and the Calgary Health Region to implement emergency responses within and beyond the revised EPZ;
- providing a detailed response protocol to address the area beyond the revised EPZ;
- relocating one family during the drilling and completion stages due to concerns about the safety of the wells and air quality given the close proximity of the family's home to the well sites;⁷
- providing nonautomated personal notification to those who have requested it within the 5 km evacuation zone;
- updating public consultation and maps of the area (on a one-time basis);
- conducting a minimum of two major deployment exercises with the actual drilling and response crews, the first of which must be completed before Compton enters the first sour zone; and
- allowing the provincial government, municipalities and the city to evaluate the deployment exercises and provide recommendations.

The Board also placed time limits on submitting the revised emergency response plan. Compton must advise the Board by August 15, 2005 if it intends to pursue these applications further and, if so, it must file a complete, revised emergency response plan by November 1, 2005. It is open for Compton to submit a request to extend the deadline, provided it makes this request before November 1. Upon receipt of the revised plan, the Board will, at a minimum, give those parties at the hearing the opportunity to comment in writing on the finalized emergency response plan.

Other conditions

Aside from the Board's directions on a revised emergency response plan, Compton must meet 14 further EUB conditions.⁸ These include technical changes to make the drilling and completion operations safer as well as time limits on the well licenses. If the licenses are issued, they will expire on January 1, 2008. Licenses for wells that have not

been spudded (begun drilling) by that date will become invalid. Further, the wells and surface facility must be abandoned and removed 15 years from the date of the first well license approval or by July 1, 2021, whichever is earlier.⁹ The Board expects that reclamation activities would be initiated after abandonment but did not specify timelines for reclamation to occur or to be completed.

Public consultation

The Board was critical of Compton's approach to public consultation, which was based on meeting the minimum requirements. In light of the unique and complex circumstances of the application, the Board found that a broad, inclusive and ongoing public involvement program should have been implemented and maintained.¹⁰ The Board emphasized that the EUB guidelines for public consultation were minimum expectations only and that an applicant's responsibility for public consultation did not conclude once its applications had been filed with the Board. These comments by the Board appeared to be intended to address interveners' concerns that Compton was "unresponsive and unilateral in its actions."¹¹

The Board directed Compton to provide, at a minimum, an updated and detailed public information package on its revised emergency response plan to all interested parties for review and comment. Further, the Board expected Compton to discuss with those parties included in the revised emergency response plan (within the 9.7 km radius) how it incorporated their concerns and the provisions it put in place to protect their safety.¹²

Comment

On a positive note, this decision highlights the Board's commitment to public consultation. However, in past decisions the Board has been persuaded to reject energy applications if consultation was inadequate and the company was found to have poor relations with the public.¹³ Although Compton was reprimanded for its minimalist approach to consultation, the Board did not go as far as rejecting the well applications on this basis.

In its decision, the Board avoided the difficult question of whether energy projects should be located in or near densely populated areas of the province. Ultimately, the Board concluded that the proposed wells could be drilled safely and that the granting of the well licenses was in "the public interest" provided that Compton gained the Board's approval of its revised emergency response plan.¹⁴ While arguably the Board has made it difficult for Compton to go ahead with its applications by imposing many conditions, directions and timelines, the Board has also left the door open for Compton to obtain the well licenses. Furthermore, even if Compton decides not to pursue the well applications, the door is open for other companies to apply to develop energy projects near urban areas provided they can submit adequate emergency response plans and can commit to inclusive, ongoing public consultation and involvement.

Potentially, this was a decision fraught with huge implications for a province with many rapidly growing urban and suburban areas, and increasing land use pressures. Instead of addressing these issues, the EUB placed the ball squarely in Compton's court, leaving parties with concerns about energy development to wait for Compton's next move.

¹ The wells are level two critical sour gas wells, with a hydrogen sulphide content of 35.6 percent, see Alberta Energy and Utilities Board Decision 2005-060 at 1.

² *Ibid.* at 7.

³ Alberta Energy and Utilities Board *Interim Directive 2001-5* allows an applicant to apply for a reduced EPZ of a minimum radius of 4 km provided that there is a commitment to ignite a well release within 15 minutes of the release. Ignition of the release results in the conversion of H₂S to sulphur dioxide (SO₂). Although SO₂ also presents a hazard, the additional plume rise from combustion results in dispersion which reduces the exposure to the hazard at ground level, see *ibid.* at 32-33.

⁴ *Ibid.* at 42-43.

⁵ The revised EPZ was based on dispersion modelling results provided by consultants retained by the Front Line Residents Group, an intervener, in the application, see *ibid.* at 34-36.

⁶ *Ibid.* at 44, 48-50.

⁷ *Ibid.* at 23-24.

⁸ A summary of the conditions are provided, see *ibid.* at 55-56.

⁹ See *Dynegy Canada Inc. Application for Pipeline Licence Amendments, Okotoks Field; Pinon Oil and Gas Ltd. Application for a Sour Gas Compressor Station and Pipeline Licence, Crossfield Field* (21 March 2000) Decision 2000-20 and Decision Addendum 2000-20 (Alberta Energy and Utilities Board) Applications 1034767 and 1034762. As part of its decision affecting the Chestermere sour gas pipeline system, the EUB accepted a collaborative Land Use and Resource Development (LRD) Agreement between directly involved area landowners, Compton, and other industry parties (the Chestermere pipeline was formerly licensed to Dynegy Canada Inc.). This agreement contemplated the accelerated depletion (within 15 years) of sour gas reserves from the lands involved in the Compton applications. The purpose of Compton's applications to drill the additional wells would be to comply with the LRD Agreement and to realize this accelerated depletion.

¹⁰ *Supra* note 1 at 42.

¹¹ *Ibid.* at 42.

¹² *Ibid.* at 48.

¹³ See Keri Barringer, "Sour Gas Well Application Denied" *Environmental Law Centre News Brief*, vol. 19:1, 2004, online: Environmental Law Centre <<http://www.elc.ab.ca/publications/NewsBriefDetails.cfm?ID=805>>; Cindy Chiasson, "EUB Rejects Sour Gas Well for Public Safety" *Environmental Law Centre News Brief*, vol. 16:2, 2001, online: Environmental Law Centre <<http://www.elc.ab.ca/publications/NewsBriefDetails.cfm?ID=709>>; Shawn Denstedt, "EUB Demands More Effective Public Consultation" *Environmental Law Centre News Brief*, vol. 15:2, 2000, online: Environmental Law Centre <<http://www.elc.ab.ca/publications/NewsBriefDetails.cfm?ID=672>>.

¹⁴ *Supra* note 1 at 26.

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