## ALBERTA ENERGY AND UTILITIES BOARD

Calgary Alberta

APPLICATION FOR A WELL LICENCE CROSSFIELD FIELD PANCANADIAN PETROLEUM LIMITED

Decision 96-4 Application No. 960316

#### 1 INTRODUCTION

# 1.1 The Application and Interventions

PanCanadian Petroleum Limited (PCP) applied to the Alberta Energy and Utilities Board (the Board) for a well licence for a well proposed to be directionally drilled from a surface location in Legal Subdivision 9 of Section 2, Township 24, Range 28, West of the 4th Meridian. The purpose of the well, PCP 10B CROSSFIELD 10-2-24-28 (the well), would be to obtain gas production from the Basal Quartz Formation.

In a submission dated 31 January 1996, the Town of Chestermere (the Town) advised the Board that it was opposed to the application and requested that a public hearing be held. In its submission, the Town expressed concerns about the proposed well location relative to the Town boundaries, safety, odours, noise, and aesthetics. Accordingly, the application was set down for a public hearing before a division of the Board consisting of J. D. Dilay, P.Eng., N. W. MacDonald, P.Eng. and B. T. McManus, Q.C. The Board's notice of hearing was issued on 16 April 1996, specifying a hearing date of 22 May 1996, and a deadline for the filing of interventions of 10 May 1996.

Subsequent to the issuance of the notice of hearing, the Board received a letter dated 17 May 1996 from the Town which advised the Board that it would not appear at the hearing. In the letter, the Town asked the Board to deny the application on the basis of the Town's concerns about safety, odours, the proposed location of the well relative to future residential and school development, and marketability of annexed lands.

The Board also received a submission dated 9 May 1996 from Chestermere Park Estates (the Estates), which expressed concerns respecting health hazards and land devaluation. Subsequent to discussions between the Estates and PCP, the Estates advised the Board that it also would not appear at the hearing.

In light of the positions of the Town and the Estates, that they would not appear at the hearing, the Board decided to cancel the hearing. This report provides the Board's decision on the application.

## 2 CONSIDERATION OF THE APPLICATION AND INTERVENTIONS

Information filed by PCP indicated the proposed well could be expected to encounter gas containing hydrogen sulphide (H<sub>2</sub>S) and have an associated release rate of 0.0278 cubic metres per second. The well would therefore be classified as Level I, in accordance with the Board's Interim Directive ID 87-2, Sour Well Licensing and Drilling Requirements. The emergency planning zone associated with the release rate was calculated at 250 metres (m). The surface location for the proposed well was to be situated approximately 515 m east of land recently annexed to be included within the limits of the Town and 700 m from the closest residence.

PCP recognized that the concerns expressed by the Town and the Estates focused on such issues as the presence of H<sub>2</sub>S in the well, setback restrictions, land devaluation, safety, odours, flaring, and aesthetic impacts. PCP corresponded with the two intervening parties in an attempt to address outstanding concerns. As well as complying with the technical requirements of the Oil and Gas Conservation Regulations (the Regulations), PCP undertook to carry out certain mitigative measures in an attempt to alleviate the concerns. Notwithstanding that the level of H<sub>2</sub>S was anticipated to be relatively low, PCP undertook to drill and operate the well recognizing the potential hazards of H<sub>2</sub>S through such measures as H<sub>2</sub>S monitors, surface and subsurface safety valves, and fencing the well site. Flaring of the well for the test period would be approximately 5 days. Permanent production would be through a pipeline which would be a closed system. To address the aesthetics of the site, PCP undertook to keep lease equipment to a minimum and to design it to blend into the surrounding countryside. With respect to concerns regarding land devaluation, PCP had reviewed studies conducted in the Caroline area of Alberta which were unable to confirm land values were impacted due to proximity to oil and gas properties.

In its submission to the Board, the Town, while not taking issue with the technical merits of the application, submitted that the well could negatively impact the community. The presence of  $H_2S$  in the area raised concerns from the Town on behalf of the area residents as to safety issues and odours. As lands in close proximity to the well had recently been annexed by the Town for future development, the well may still be in production when the area is fully developed. The presence of sour gas wells could also affect the marketability of these newly annexed lands and adversely impact the Town's ability to generate tax revenue. Given these factors, the Town requested that the Board consider denying the application.

The submission of the Estates supported the position of the Town respecting the presence of  $H_2S$ , safety, development restriction, and reduction in property values. As urban development occurred, a new school could also be required in the area and the Estates noted that a church camp already existed in the area. The Estates indicated that significant work and expense had already been committed to long range planning for the area. The presence of the well could be detrimental to future growth and have a negative effect on property values, now and in the future. The Estates believe therefore, that the presence of the proposed well so close to an urban centre was not in the best interest of the public.

The Board has considered the material submitted by PCP, the Town, and the Estates. The Board notes that the application meets the requirements of the Regulations and the technical expectations of the Board. The Board is aware of the communication which occurred between

the parties to define and address outstanding issues. The Board notes the safety measures proposed to be carried out by PCP and believes that the proposed well would not present an unacceptable public safety risk. The Board considers the mitigative measures proposed by PCP to be appropriate. Production is to be through a closed system, as PCP proposes to pipeline gas production, minimizing the potential for fugitive odours. Once the initial production test has been performed on the well, flaring would occur only in an emergency situation. The Board does not believe that sufficient evidence was presented by the Town or the Estates to conclude that the proposed well would have a material impact on land values. The Board accepts PCP's undertaking to design any surface facilities to reduce any aesthetic impacts.

## 3 DECISION

Having regard for all of the above, the Board is prepared to approve Application No. 960316. The well licence will be issued in due course.

DATED at Calgary, Alberta, on 5 June 1996.

#### ALBERTA ENERGY AND UTILITIES BOARD

[Original signed by]

J. D. Dilay, P.Eng. Board Member

[Original signed by]

N. W. MacDonald, P.Eng. Board Member

[Original signed by]

B. T. McManus, Q.C. Board Member