#### ALBERTA ENERGY AND UTILITIES BOARD

Calgary Alberta

STAMPEDE OILS INC. SECTION 42 REVIEW OF WELL LICENCE NO. 0239741 AND APPLICATIONS FOR ASSOCIATED PIPELINES TURNER VALLEY FIELD

Decision 2001-109 Applications No. 1064455, 1237635, 1242414

#### 1 INTRODUCTION

In accordance with Section 2.020 of the Oil and Gas Conservation Regulations (OGCR), Stampede Oils Inc. (Stampede) applied to the Alberta Energy and Utilities Board (EUB/Board) on May 1, 2000, for a licence to drill a sour well with a hydrogen sulphide (H<sub>2</sub>S) content of 27.1 moles per kilomole (mol/kmol) (2.71 per cent). The applied-for surface location was in Legal Subdivision (LSD) 14 of Section 27, Township 20, Range 3, West of the 5th Meridian, with the bottomhole location in LSD 2-34-20-3W5M (2-34 well). The application was approved on July 14, 2000, after Stampede agreed to comply with a number of commitments made to local residents. On December 12, 2000, a Local Residents Intervener Group (Intervener Group) submitted a request for a review of the Board's decision to issue the well licence under Section 42 of the Energy Resources Conservation Act (ERCA). On June 12, 2001, the Board granted the request for a review.

Originally the review hearing was scheduled to commence on August 28, 2001. The Board received requests from parties to adjourn the hearing and to hold a prehearing meeting to clarify the issues and provide parties with additional time to prepare for the hearing. The Board adjourned the hearing and granted the request to hold a prehearing meeting. The Board held the prehearing meeting on August 28, 2001, and issued the Memorandum of Decision respecting the prehearing meeting on September 6, 2001. The Memorandum of Decision outlined the scope of the hearing, applications to be included in the hearing, issues from other parties, timing of information requests, submissions, and the hearing date itself. The Board also directed Stampede to provide all confidential data pertaining to the 2-34 well to the Board, the Intervener Group, and any other participant who requested it, provided that an undertaking was signed that confirmed the party would continue to hold the information confidential until the Board rendered the information public in accordance with its regulations. The location of the 2-34 well, area landowners and residents, and the emergency planning zones (EPZs) are shown on the attached figure. The Memorandum of Decision is also attached.

# 2 APPLICATIONS

# **2.1 Application 1064455**

As noted above, a well licence was issued on July 14, 2000, to Stampede to drill the 2-34 well with an  $H_2S$  content of 27.1 mol/kmol (2.71 per cent) from a surface location in LSD 14-27-20-3 W5M to a bottomhole location in LSD 2-34-20-3W5M. Stampede completed its drilling of the well on November 10, 2000, and was in the process of the well completion when events occurred leading to the review.

# **2.2** Application No. 1237635

A licence for a temporary pipeline (Application No. 1077568) was issued on November 28, 2000, and expired on February 1, 2001. The expiry date was consistent with that applied for by Stampede. Stampede installed and operated the temporary pipeline without a licence from July 15 to 18, 2001. The EUB suspended its operation on July 18, 2001.

In accordance with Part 4 of the Pipeline Act, Stampede subsequently applied on July 20, 2001, for an amendment of its temporary licence to extend the time required to operate the pipeline to November 2001. The proposed temporary pipeline would be 200 metres (m) in length on LSD 14-27-20-3W5M and be licensed for an H<sub>2</sub>S content of 40 mol/kmol (4 per cent), to allow Stampede to complete testing of the existing 2-34 well.

# **2.3** Application No. 1242414

In accordance with Part 4 of the Pipeline Act, Stampede applied on August 21, 2001, for a licence to construct and operate a permanent sour oil effluent pipeline from LSD 14-27-20-3W5M to an existing Anderson Exploration Ltd. (Anderson) satellite located in LSD 13-27-20-3W5M. The permanent pipeline would be 450 m in length and be licensed for an H<sub>2</sub>S content of 50 mol/kmol (5 per cent), to allow Stampede to transport production from the existing 2-34 well to existing facilities.

# 3 HEARING

The Board held a public hearing in Turner Valley, Alberta, commencing on October 2, 2001, before Acting Board Members H. O. Lillo, P.Eng., G. A. Atkins, D.V.M., and N. G. Berndtsson, P.Eng. At the onset of the hearing, Stampede withdrew Application No. 1237635 for a temporary pipeline. The Board then considered Application No. 1064455, the Section 42 review regarding the 2-34 well, and Application No. 1242414 for the permanent pipeline. In addition, at the hearing Stampede relinquished the confidentiality status of the 2-34 well. Therefore, the information on the 2-34 well was made public. Those who appeared at the hearing along with a list of abbreviations used in this decision are provided in the following table.

# THOSE WHO APPEARED AT THE HEARING

THOSE WHO THE EMED IT THE HEADING	
Principals and Representatives (Abbreviations Used in Report)	Witnesses
Stampede Oils Inc. (Stampede) B. K. O'Ferrall, Q.C. M. Theroux	J. W. McLeod, P.Geol. R. B. Furukawa M. J. Hunt J. R. Bherer, P.Eng., of Frontier Engineering & Consulting Ltd. N. W. Bentsen, P.Eng., of Frontier Engineering & Consulting Ltd. K. Shewan, P.Eng., of Frontier Engineering & Consulting Ltd. J. G. Farquharson, C.E.T., of Faszer Farquharson & Associates Ltd. B. A. Polinkas, C.E.T., of Petro Plan Safety Ltd. G. Kupfer, Ph.D., of Fresh Start Limited R. Bethell M. McPherson
Curlew Lake Resources (Curlew Lake) S. K. Luft	
Shareholders of Stampede Oils Inc. (the Shareholders)	J. E. Hawthourne R. Van Nus
The Local Residents Intervener Group (Intervener Group) G. S. Fitch	<ul> <li>E. Brueckner</li> <li>L. Schmaus</li> <li>A. Wyler</li> <li>S. Brockelsby</li> <li>E. R. New,         of Cactus Hill Resources Ltd.</li> <li>C. P. Outtrim, P.Eng.,         of Outtrim Szabo Associates Ltd.</li> <li>D. S. Christie, P.Geol.,         of Outtrim Szabo Associates Ltd.</li> <li>S. Johnson, C.E.T.,         of Opus Petroleum Engineering Ltd.</li> <li>S. Dawson, R.E.T.,         of Pure Energy Services Ltd.</li> </ul>
L. and D. Miller	D. Miller
J. Kerluke	J. Kerluke

#### THOSE WHO APPEARED AT THE HEARING (cont'd)

Principals and Representatives

(Abbreviations Used in Report)

Witnesses

Alberta Energy and Utilities Board staff

- G. Bentivegna, Board Counsel
- P. R. Forbes, C.E.T.
- L. Wilson-Temple
- K. Eastlick, P.Eng.
- A. Beken, P.Eng., P.Geol.
- H. Nychkalo

#### 4 REVIEW HEARING

# 4.1 Views of Stampede

Stampede argued that the Board should not have held a hearing pursuant to the review request of the Intervener Group under Section 42 of the ERCA, submitting that there was no basis for the review, since the allegations of the local residents had no basis in fact. It maintained that the Board embarked on a review without proper investigation. It maintained that a presumption existed going into the hearing that Stampede was guilty of misconduct, breaching its commitments, making misrepresentations, and not being capable of addressing residents' concerns and that this presumption coloured the hearing. In support, Stampede cited the letters and enforcement actions of the Board following the review request, the odour complaints, and the noise complaint. It argued that the lifting of the Stampede suspensions by the EUB Midnapore Field Centre should have determined the outcome of the review request.

Stampede also submitted that some or maybe none of the persons seeking a rescission of its well licence could possibly appear to the Board as persons whose rights might be directly and adversely affected by the Board's decision to grant the well licence or its decision to review. Stampede argued that the landowner on whose land the well was located had consented to the drilling of the well. It noted that all the local resident interveners except one lived outside of the calculated EPZ, across Highway 22, and at a considerable distance from the well site. Stampede therefore maintained that, as a result of this distance, these interveners only had an interest in certain matters, such as noise and odours, but not in flaring during cleanup, operations notifications, and disposition of drill cuttings.

Stampede acknowledged that reviews are necessary in that they give the Board ongoing jurisdiction over activities in the oil and gas industry. However, it submitted that the Board must exercise its review power cautiously because it may constitute a confiscation or derogation from vested rights. Stampede referred to the two-step process used by the Board regarding review requests and argued that the Board should exercise caution in determining whether sufficient evidence existed to justify reviewing the licence in question. Stampede emphasized that the Board should investigate a complaint prior to making the determination to review.

#### 4.2 Views of the Interveners

Curlew Lake supported Stampede's submissions that the hearing was not necessary.

The Intervener Group submitted that Stampede was rearguing in great detail the decision of the Board to hold a review hearing. The Intervener Group also submitted that it was not helpful to the Board to dwell on whether the right decision was made to hold a review.

In response to the Stampede submission that the members of the Intervener Group did not have an interest in the well, the Intervener Group argued that it was obvious that the residents that made up the group were within the EPZ established by Stampede and as such had an interest. The Intervener Group submitted that it was unheard of for an applicant or a company to argue that a resident within an EPZ did not have an interest in the facility.

#### 4.3 Views of the Board

The Board notes that Section 42 of the ERCA states: "The Board may review, rescind, change, alter or vary an order or direction made by it, or may rehear an application before deciding it."

In exercising its discretion under Section 42, the Board adopted a two-step process: the first step is to determine the preliminary question as to whether the review should be granted, and the second step, if it is granted, is to hold a hearing on the merits. In other words, on the preliminary question, the Board considers the evidence and submissions of the parties. The Board does not consider the substance of the issues at this stage. The purpose of a review hearing is to determine the issues raised by the review request and to provide the parties with an opportunity to present their cases. The Board does not investigate the allegations, as it is of the view that to do so would result in a breach of procedural fairness. The courts have set out the test that the Board follows in deciding the preliminary question. The Board has now set out the test in Section 46 of the Board's Rules of Practice, which states in part:

- (4) The Board shall determine, with or without a hearing, in respect of an application for review the preliminary question of whether the matter should be reviewed and whether there is reason to believe the order, decision or direction should be rescinded or varied.
- (5) After determining the preliminary question under subsection (4), the Board may (a) dismiss the application for review if,
  - (i) in the case where the applicant has alleged an error of law or jurisdiction or an error in fact, the Board is of the opinion that the applicant has not raised a substantial doubt as to the correctness of the Board's order, decision or direction, or
  - (ii) in the case where the applicant has alleged new facts, a change of circumstances or facts not previously placed in evidence, the Board is of the opinion that the applicant has not raised a reasonable possibility that the new facts, the change in circumstances or the facts not previously placed in evidence, as the case may be, could lead the Board to materially vary or rescind the Board's order, decision or direction, or
  - (b) grant the application.

(6) If the Board grants the application under subsection (5), it shall issue a notice of review, and a new hearing must be held in accordance with these Rules.

In the case before the Board, local residents submitted a request for a review of the Board's decision to issue the well licence on December 12, 2000. Responses and correspondence from Stampede and the area landowners continued from January 16, 2001, to May 11, 2001. On June 12, 2001, the Board granted the request for a review, stating in its letter that in considering the submissions of the parties, "circumstances existed which warranted a review of the abovementioned well licence. The Board considers that the area landowners raised a reasonable possibility that a review of these circumstances might alter the original decision to grant the well licence." In response to letters from counsel for Stampede, counsel for the Board on July 13, 2001, wrote to the parties:

With respect to the issue raised about the circumstances on which the Board made its decision to grant a review, though these are not specifically set out in the Board's letter of June 12, 2001, it is implicit in that letter that they are the circumstances referred to in Ms. Brueckner's and other landowners' review request dated December 12, 2000. Specifically, the area landowners submitted that Stampede had not endeavored to fulfill its commitments made to them and that Stampede's ability to address landowner and resident concerns during operation was in question. The reason for these submissions was that:

- flaring had taken place on site, since in addition to the propane pilot, sour gas from the lubricator was being burned,
- landowners were unable to contact Stampede representatives listed in the emergency and information packages during the flaring incident, and
- resident notification prior to commencing completion operations did not occur.

As a result, a hearing on the merits was granted. The Board emphasizes that the decision on the preliminary question was made on the information and submissions made by the parties. As noted above, the purpose of the review hearing was to hear evidence and submissions regarding the issues raised in the review request.

On the issue as to whether the members of the Intervener Group had the potential to be directly and adversely affected, the Board is of the view that they did. The Board noted that Stampede admitted that there could be some direct and adverse effects from the well, such as noise and odours, on these same residents. If there are any potential direct and adverse effects, such persons may trigger a hearing. The Board notes that the residents in question resided within the EPZ, established by Stampede and approved by the EUB prior to the drilling of the well. As a result, the Board does not accept Stampede's submissions that the distance from the well precluded the potential for direct and adverse effects on the members of the Intervener Group.

Furthermore, the Board dismisses Stampede's argument that there was presumption of guilt against Stampede that coloured the hearing. The Board is of the view that no such presumption existed, as the purpose of the hearing was to determine, on the merits, whether the well licence should be varied or rescinded. The Board notes that the enforcement actions taken in this case have been separate and distinct from the review process. The Board also notes that if Stampede was aggrieved or felt unfairly treated by the enforcement action taken against it by the Board, it could have taken the steps to ask for a review of those actions. In the view of the Board, the propriety or correctness of the enforcement action taken by the Board was not the subject at the hearing, despite Stampede's attempts to make it an issue. In short, the Board wants to make it clear that Stampede's well operations were shut down because it did not have a valid pipeline

permit and not because of the Section 42 review.

#### 5 ISSUES

The Board considers the issues respecting the application and hearing to be

- commitments
- compliance
- mineral rights, reserves, and productive capability
- need for the pipeline and related matters
- public consultation, communications, and community relations
- operations management
- future operations

#### 6 COMMITMENTS

When Stampede first filed an application to drill the 2-34 well, residents objected and outlined several conditions that would have to be met to satisfy their concerns. Stampede provided a number of commitments in "Information Package No. 2," dated April 10, 2000. Stampede made the following commitments:

# **Drilling Phase**

- 1) Emergency Response Plan (ERP) and Communications
  - The Emergency Planning Zone (EPZ) has been expanded, from the calculated 871 metre radius, to a rectangular shaded area and all of the residents, other area operators and non-resident landowners within this area (refer to the "grey" shaded area on the enclosed area map) shall be included within our site specific ERP.
  - An automated telephone system (refer to the enclosed Comm-Alert brochure), in conjunction with personal telephone calls and visitations, will be utilized to inform and notify the area residents, other area operators and non-resident landowners within our established EPZ of any potential emergency situations during drilling, completions or well testing operations.
  - A 24-hour number will be provided for the residents who may have any questions or concerns. This number can be used to contact Stampede's community relations representative who will react immediately to any concerns.

#### 2) Noise During Drilling

- A diesel electric rig will be used, if available.
- Soundproofing will be added to the drilling rig, if necessary.
- Use of engine retarder brakes (Jake brakes) will be prohibited on the roads used by trucks supplying materials and services.
- All AEUB noise guidelines and directives will be met or exceeded, and we will conduct periodic noise tests to verify our compliance.
- The possibility of additional sound control measures will be assessed on an ongoing basis during drilling.

# 3) Traffic Volume and Safety

- Access to the site will be off Highway 22 east of the wellsite.
- The rig move will be done during non-peak hours and not during the early morning or late afternoon periods.
- A rig camp will not be located on site.
- A list of traffic compliance expectations will be provided to all drivers and contractors engaged in business related to the drilling operations. There will not be any tolerance of traffic infractions.

#### 4) Road Conditions and Dust

- Stampede will be working with the Municipality to ensure that the roads are maintained in good condition. Grading and repairs, if necessary, will be recommended on an ongoing basis.
- During periods of excessive wetness heavy vehicle traffic will be limited.

# 5) Lights

- Task lighting will be directed away from residents wherever possible.
- Glare from rig lighting will be minimized.
- The need for additional control measures will be assessed on an ongoing basis along with any concerns should they arise.

# 6) Water Well and Water Supply Concerns

- A water well will not be drilled on site. All water used for drilling and potable water will be trucked to the site from approved sources.
- Stampede will be responsible for any possible damages to water wells and water supplies in the unlikely case of where such damage might occur as a result of its operations.
- Stampede will have the water wells and water supplies tested by a professional testing company, for those who have requested this service. Testing will be conducted before and after drilling operations and copies of the results provided.

#### 7) Environmental Concerns

- All efforts will be taken to ensure a clean and safe work area.
- A sump will not be located on site; all fluids will be stored in above ground steel containers.
- All spent drilling fluids and drill cuttings will be disposed of in an approved fashion.

#### Completion and Testing Phase

#### 1) Well Testing and Flaring

- It is not intended to flare formation gas during well testing operations.
- The well will be tested "in line" by tying into, or connecting to, existing Anderson Exploration Ltd. or Talisman Energy Inc. pipelines in the area.
- Area residents and landowners will be notified prior to commencing completion and well testing operations.
- Well testing will be kept to a minimum.
- Stationary air quality monitors will be set up at points around the well to monitor for the

possible presence of hydrogen sulphide (H<sub>2</sub>S) and sulphur dioxide (SO<sub>2</sub>) during well testing operations.

- A mobile air quality-monitoring unit will be present during well testing operations.
- All fluids will be transported to and from the well site in vapour proof/sealed vessels.

Production Phase (in the event of a commercial well)

#### 1) Permanent Facilities on the Well Site

- It should be emphasized that the subject well location is situated within the existing Turner Valley oilfield, between two producing oil wells.
- A minimum of facilities will be located on site.
- In the case of an oil well, the on-site facilities could include a well head and it is intended that the oil will be delivered by flow line to Anderson Exploration's adjacent oil battery. Solution gas will be recovered and transported to the Imperial Oil Quirk Creek Gas Plant for processing, via existing Anderson Exploration pipelines.
- In the unlikely event of a gas well, the on-site facilities could include, a line heater or dehydrator unit along with a contingency flare stack that would only be used on rare occasions during periodic maintenance operations. The gas would be delivered into a Talisman Energy sour gas pipeline, located immediately adjacent to the 14-27 surface location, and transported to the Imperial Oil Quirk Creek Gas Plant for processing.

# 2) Odours

- Fuel gas from the local gas co-op will be used to operate any on-site equipment. Produced formation gas will not be used to operate any on-site equipment.
- There will not be any flaring on-site, as the solution gas will be recovered and transported to the Imperial Oil Quirk Creek Gas Plant for processing, via existing Anderson Exploration pipelines.

#### 3) Future Development Plans

- At the present time Stampede does not intend to drill any additional wells from this location.
- Residents would be consulted prior to any further developments.

Stampede further provided a number of commitments in its "Information Package No. 3," dated June 8, 2000, resulting from additional area resident concerns and questions. Stampede made the following commitments with respect to noise and flaring:

#### NOISE DURING DRILLING

- The primary commitment is to meet all AEUB noise guidelines and directives
- A diesel electric rig will be used
- A noise survey of the rig to be used will be obtained prior to contracting for the rig to determine suitability
- All engines will be equipped with hospital style mufflers
- Pre-fabs will be installed to enclose high noise areas
- Best efforts will be used to avoid tripping between the hours of 10:00 PM and 7:00 AM.

#### **FLARING**

- There will be no flaring on site during testing or production operations
- Arrangements have been made with Anderson Exploration to utilize their adjacent battery for both testing and production in the case of an oil well. A short pipeline will be installed from the well site to the Anderson battery facilities and all well fluids delivered to the existing battery through this line. The solution gas will be recovered existing at these facilities and transported through existing lines to the Imperial Oil Quirk Creek plant for processing.

Subsequent correspondence from Stampede to interested parties provided further clarification to these commitments.

# 6.1 Views of Stampede

Stampede acknowledged that it had made commitments regarding drilling and related aspects of the well activity to address resident objections. It agreed that as a result of these commitments, the objections were withdrawn and the EUB subsequently issued the well licence.

Stampede said that it had committed to use a diesel-electric drilling rig and noise-attenuating cladding and to avoid tripping the drilling string at night. It said that it believed it had met its commitments with respect to drilling noise.

Stampede said that it held a town hall meeting prior to drilling into the sour formations to review its emergency response plan (ERP). It stated that its ERP provided for a veterinarian and transportation services for livestock and documented the inventory of equipment that was to have been provided. It noted that based on the feedback of some residents, it had arranged for an alternate veterinarian, only to find that others wanted the original veterinarian. It said that it reinstated the original person, who directed further arrangements apparently not to the satisfaction of some of the residents. It said that the ERP indicated that three trailers were to be positioned in the Wylers' yard, but admitted that this was apparently not done. Stampede stated that while it did provide its ERP as part of the resident information package, it did not believe that the specifics for animal movement procedures were provided in the plan.

Stampede stated that it had committed to notifying residents before commencing completion or testing operations and relied upon its engineering consultant to fulfill that commitment. It said that due to an oversight related to changing its engineering consultant in November 2000, notification was not initiated prior to completion activities commencing in December 2000. It said, however, that after that date it used the Comm-Alert system to notify residents at least three to five days in advance of planned activities.

Stampede indicated that it had committed to residents that it would not flare formation gas during well testing or production operations at the well site. Stampede stated that it should have indicated that there might be some flaring during completion operations. During discussions on emergency planning, Stampede said it had indicated flaring might occur at the well site for emergency and safety considerations. It further noted that the propane-fuelled flare pilot was needed for safety and that it believed the pilot did not constitute flaring.

Stampede said that the only flaring that occurred at the well site included a one-half hour event on December 9, 2001, to clean up the well and some two- to four-minute events to depressure the well head lubricator during well completion operations. It noted that due to wind conditions on December 9, 2000, it had increased propane flow to the flare pilot to ensure ignition of any sour gas. Stampede said it did not believe it had contravened its commitment not to flare during testing and production operations.

In its direct evidence, Stampede stated that it was very conscious of the environmental standards that it must adhere to. It noted that its operations had used a sumpless mud system and a centrifuge separation facility in the drilling of all of its wells in the Turner Valley area, which eliminated the need for major drilling fluid waste pits. Stampede also stated that this added a considerable expense, but it believed the expense to be worthwhile in terms of addressing environmental concerns. In response to questions posed by the Board, Stampede undertook to provide a report on the materials being stored on the 2-34 well site in an aboveground containment area. This report showed that the bermed area in the northwest corner of the lease contained approximately 192 cubic metres (m<sup>3</sup>) of liquid and 558 m<sup>3</sup> of solids. Stampede confirmed that these volumes were in addition to the approximate 400 m<sup>3</sup> of shale/clav located on its drilling site. Stampede acknowledged that the materials from the aboveground containment area did not meet conventional disposal criteria due to the excessive total salt and sulphates content. Stampede stated that the material was being trucked to an appropriate waste disposal facility in central Alberta. Stampede also acknowledged that it had recently been made aware of an off-lease spill of liquid from the bermed area; however, it was uncertain as to whether notification had been given to the EUB.

#### **6.2** Views of the Interveners

Curlew Lake submitted that the 2-34 well was drilled with very few and very minor well site issues.

The Shareholders agreed with Stampede that the "no flaring commitment" applied to testing and production and noted that Stampede had only flared during completion operations. They noted that the flare volumes, emission levels, and noise levels did not reach notification levels and believed that Stampede was in compliance with guidelines.

The Intervener Group stated that Stampede had committed to provide notification to residents prior to completion operations but had not given any notice of activities at the well site prior to the December 9, 2000, flaring incident. They noted that the flare was a significant size, greater than implied in Stampede's description that the propane pilot fuel flow had been increased.

With respect to flaring, the Intervener Group said that the Board needed to consider what the residents understood regarding flaring. They noted that Stampede's statements regarding flaring in its information packages and in a letter to an area landowner indicated that it had committed to no flaring. They said that residents expected that flaring might occur at the Anderson satellite, but they believed there would be no flaring at the well site. With respect to the December 9, 2000, flaring incident, they stated that five different local residents saw a large flare on that date.

The Intervener Group said that Stampede had not made provision for transporting animals consistent with its commitments. Members of the group stated that they raised specialty animals

of considerable value. They noted that in one instance there were inadequate loading facilities and fewer trailers provided than what had been indicated would be available in Stampede's ERP. In another instance, one resident was directed to pick out a suitable trailer at a dealership, and Stampede's truck drivers did not have any apparent experience in hauling livestock. The Intervener Group indicated that animal evacuation provisions were changed relative to the initial ERP consultations with residents without discussion.

#### 6.3 Views of the Board

The Board believes that the commitments made by Stampede resulted from negotiations with local residents and were instrumental in residents removing their objections to the well. While these commitments may not strictly be required by the Board's regulations or guidelines, it is the Board's view that when a company makes commitments, the company has satisfied itself that the activity is reasonable and will benefit both the project and the public. The Board believes that applicants making commitments should take them very seriously or risk subsequent reviews by the Board. The Board expects the applicant to fully carry out the commitments or advise the Board and the parties involved if, for whatever reason, it cannot fulfill the commitments. The Board is of the view that affected parties have the right to ask the Board to review an approval if commitments made by an applicant remain unfulfilled or are arbitrarily altered. However, only commitments that are within the Board's jurisdiction may form the basis for a review request. In this case, the Board believes that, as discussed below, changes in and failure to meet some of the resident expectations arising from Stampede's commitments after issuance of the well licence were cause for the review requested by the Intervener Group.

The Board notes that the list of commitments was extensive and that the majority of Stampede's commitments were apparently kept. However, it also notes that some of the commitments are general statements of typical industry operating practices or standard EUB regulatory requirements.

The Board notes Stampede's admission that it failed to advise residents of completion operations, which it had committed to do. The Board also notes that Stampede was specifically alerted to the need to update contact information in its ERP by its past engineering consultant but that it had failed to react.

It is the Board's view that the evidence does not indicate that Stampede failed to comply with EUB well flare notification requirements in December 2000. However, it did fail to notify the nearby residents of well cleanup and operations. The depressurization of the wellhead lubricator likely resulted in products being diverted to the flare stack, which, along with an abundance of propane, increased the flame at the stack.

The Board understands Stampede's contention that it never said it would not flare at its well site during completion activities. Further, the Board accepts that some flaring is generally inevitable during drilling, completions, and operations maintenance phases of a well, notwithstanding the Board's efforts, along with industry and public stakeholders, to reduce or eliminate upstream petroleum industry flaring and venting. However, the Board believes that Stampede's discussion with residents about flaring during testing and production did not specifically identify conditions when flaring might occur. As a consequence, the Board believes that these discussions led to a

reasonable resident expectation that there would be no flaring at Stampede's well site during any of its operations.

The Board notes that provisions for animal evacuation are not currently part of EUB emergency response planning requirements. However, Stampede made commitments to residents to provide for animal evacuation during drilling. The Board notes that hearing testimony indicated a difference between resident expectations and those provisions actually implemented by Stampede.

The matter of sumpless drilling was not specifically part of the Section 42 process. However, Stampede addressed it in its direct evidence, and a site visit by the Board and staff raised some concerns. The Board believes that Stampede failed to meet its commitment to work toward the use of a sumpless drilling system to mitigate environmental effects. Stampede's commitment was to store all fluids in aboveground steel containers. The Board notes that although a sumpless drilling system might have a small sump to accommodate cement returns and rig wash water, the sump at this location contained more constituents and volumes than reasonably could be expected. It is the Board's view that sumpless drilling requires on-site tankage used to collect and contain dewatered drilling materials. If used, drilling waste sumps must contain all fluids with no leakage. The Board has referred this matter to its Midnapore Field Centre to determine if Stampede is compliant with the regulations, including notification requirements to the EUB.

The Board believes that Stampede failed to meet resident expectations with respect to its commitments related to sumpless drilling, flaring, and notification of completion operations. That said, the Board does not believe that the incidents in question compromised public safety. Of greater concern to the Board is the apparent lack of management control and/or the miscommunication within Stampede's project team of staff and consultants. First, commitments were apparently made without a process to test practical feasibility. Second, the commitments were not communicated in a fashion that ensured consistency between resident understanding and Stampede's intentions. Third, Stampede failed to ensure that its obligations arising from its commitments (e.g., notification of residents prior to starting well completion operations) were properly communicated when staff and contractors changed. This matter is discussed further in Section 11 of this report. The Board is of the view that Stampede must implement changes to its operations and compliance management systems to ensure that commitments are achievable, properly communicated, and delivered.

### 7 **COMPLIANCE**

When an application is made pursuant to the EUB's enactments, certain minimum requirements must be met to ensure public safety and the technical soundness of any proposal. This section deals with compliance with EUB noise and odour requirements.

# 7.1 Views of Stampede

Stampede said that it responded to the June 28, 2001, resident noise complaint by performing a preliminary noise survey that day. It stated that it also installed additional mufflers on the well pump drive engine on that date. Stampede noted that the preliminary noise survey and a subsequent comprehensive survey indicated compliance with the EUB's *Interim Directive (ID)* 99-8: Noise Control Directive. It said that in its comprehensive sound survey report, it did not

address low-frequency cyclical tones that may have been related to the noise complaint. It noted that the survey was conducted according to guidelines and results indicated compliance with the noise directive. Stampede indicated that should the well licence be continued, it would install an electric motor if a pumping unit was necessary to produce the well.

With respect to the April 4, 2001, odour incident, Stampede said that an acid treatment was performed on the well on April 3, 2001. It stated that flow-back operations were started on April 4, 2001, and that facilities included a separator, pressure tank, incinerator, and flare stack. Once H<sub>2</sub>S was identified in the flow-back, fresh water and ammonia were injected to scavenge the H<sub>2</sub>S. It said that when H<sub>2</sub>S was first detected, the incinerator operation indicated the flow-back gas was not burning, likely due to the high nitrogen content of the gas. It noted that the well was shut in when H<sub>2</sub>S was detected and air-monitoring equipment was redirected from south to north of the well. The monitor recorded a 29 parts per billion (ppb) H<sub>2</sub>S reading about an hour later for three to four minutes at the monitoring location north of the well. Stampede noted, however, that it did not detect any exceedance of the 10 ppb, one-hour Alberta Ambient Air Quality Guideline for H<sub>2</sub>S and consequently did not report the incident to the EUB.

With respect to a resident complaint on April 6, 2001, regarding odours over a two-day period, Stampede said that monitors on its lease measured no H<sub>2</sub>S. However, it accepted that there was a possibility that Stampede could be the source of the odours. It further noted that monitoring it had conducted in May 2001 had identified other H<sub>2</sub>S emission sources in the area, including another operator's leaking well near one of the residences.

#### 7.2 Views of the Interveners

The Intervener Group said that noise was affecting an area landowner's sleep and that noise surveys, notwithstanding the muffler installation, did not address low-frequency sound problems. They noted that Stampede's noise consultant knew that the muffler may not have addressed the concern and that the muffler installation had only a marginal effect on the low-frequency noise. They referred to *ID 99-8* and noted that the directive states that noise from oil and gas facilities should not result in conditions where sleep inside buildings is disturbed.

The Intervener Group said that Stampede acknowledged the escape of sour gas on April 4, 2001, and subsequently observed an ambient air  $H_2S$  reading of 29 ppb more than 1.6 km from the well site. The Intervener Group was of the opinion that it was plausible that stronger odours and  $H_2S$  levels could have occurred at residences closer to the well and that the evidence pointed to Stampede's well as the source.

#### 7.3 Views of the Board

The Board notes that while Stampede's response with respect to the noise complaint did not appear to have fully addressed resident concerns, it indicates that Stampede took prompt action to investigate and attempt to reduce the noise level. Further, the Board notes that the results of the comprehensive noise survey indicate compliance with the Board's noise directive. Should it decide to continue the well licence, the Board anticipates that the noise matter would be addressed by Stampede's plan to electrify pumps at the well.

On the balance of the evidence, the Board believes that Stampede's operations were a potential source of the odours detected on April 4, 2001. The Board also notes that other sources of odours are present in the immediate area. No evidence was presented to indicate conclusively that an exceedance of the one-hour Alberta Ambient Air Quality Guideline for H<sub>2</sub>S occurred. The Board notes that EUB *Guide 60: Upstream Petroleum Industry Flaring Guide* requires operators to control sources of continuous or repeated off-lease odours. *Guide 60* also requires operators to ensure complete burning of any gas releases that contain H<sub>2</sub>S in the concentrations reported for the Stampede well.

In this case the Board believes that Stampede could have anticipated that gas containing significant H<sub>2</sub>S concentrations could be present in the otherwise incombustible well flow-back and should have taken proactive measures to prevent the H<sub>2</sub>S release. Further, the Board believes that Stampede should have gauged the situation better, given the H<sub>2</sub>S release, the monitored H<sub>2</sub>S peak, and the number of concerned residents in the area, and it would have been prudent for Stampede to have notified the residents and the EUB Field Centre of the incident on April 4, 2001. Such notice would have enabled EUB staff to better address any related public concerns and complaints.

# 8 MINERAL RIGHTS, RESERVES, AND PRODUCTIVE CAPABILITY

Pursuant to Section 13 of the Oil and Gas Conservation Act, an applicant must acquire appropriate mineral rights to apply for a licence to drill a well. The EUB accepts an applicant's statement that it has acquired such rights. Unless advised to the contrary, the Board does not question the stated purpose of the well. Once drilled and producing, an audit of the minerals is conducted to ensure that the mineral agreement relied upon to acquire a well licence is appropriate, given the product being produced from the well (i.e., oil or gas).

# 8.1 Views of Stampede

Stampede asserted that by owning the mineral rights, the need for the well was established, subject to the impact of the operations on the surface owners or the public. Stampede did not believe that judgements on the potential for production from the well should be factored into its rights to evaluate its mineral rights. It further noted that it was a common oilfield practice to try to obtain as much technical information as possible about a reservoir so that it could be used for future exploration even if a well was not a successful producer. Stampede maintained that it had not been allowed to complete its evaluation of the 2-34 well in that regard.

Stampede said that it had been incorporated as a company in 1987, with a main focus on the Turner Valley project. It believed that the main oil pool in the area had not yet been found. Stampede stated that it had drilled seven deep wells, six of which were operated by Stampede, and noted that other operators have subsequently drilled successful wells in the area based on Stampede's geological interpretations.

Stampede stated that the company had sufficient supporting data, including seismic, geological, and engineering evidence, to demonstrate that the 2-34 well was the discovery well to a major bypassed oil pool with potential recoverable reserves of at least 79.5 million (10<sup>6</sup>) m<sup>3</sup> (500 million barrels) of oil and 4.2 trillion (10<sup>10</sup>) m<sup>3</sup> (1.5 trillion cubic feet) of gas.

Stampede stated that the 2-34 well confirmed its interpretation of the geological and seismic data that it had prior to drilling the well. Further, Stampede also stated that the oil reserves discovered in the 2-34 well are also penetrated by a number of existing nearby wells. It further stated, however, that the earlier wells did not produce from this reservoir. Stampede contended that the 2-34 well could produce for many years without any need for pumping.

Stampede considered about 2.4 10<sup>6</sup> m<sup>3</sup> (15 million barrels) of light oil to be present in Section 34, half of it being recoverable reserves. It estimated the 2-34 well to be capable of producing 159 m<sup>3</sup> (1000 barrels) of oil per day for 20 to 24 years. It speculated that due to updip migration of oil, the well might be productive for up to 50 years as a flowing oil well. Additionally, Stampede envisioned that a total of 41 wells, drilled from 15 surface locations, might eventually be needed to produce the reserves associated with the oil accumulation it believed it had discovered through the 2-34 well. Stampede also considered this well to have potential for improved production and higher oil rates than indicated by the initial and very limited production.

Stampede said that it had spent \$36 million on exploration and \$10 million on lease acquisition in the area. Stampede stated that the costs were substantive and that financial capability had not been made an issue at the prehearing meeting. Further, it pointed out, the matter had been addressed in *Decision 99-30* in general principle.

#### **8.2** Views of the Interveners

Curlew Lake said that whether the well was viable was irrelevant, as the Board should only consider information that related to the impacts the 2-34 well might have on residents. It stated that evidence advanced solely to argue the productive capability of the 2-34 well should be disregarded.

The Intervener Group argued that the viability of the well was relevant to activity associated with the well into the future. They said that an objective third-party view should be of interest to the Board. The Intervener Group engaged an expert panel to review geological, drilling, engineering, and production information on the 2-34 well so that the Board could properly evaluate future operations on that well site. Although they said that other interveners would have liked to understand the potential for more activity at the well location, they noted that the only members of the public that were aware of the work of their experts were those who had agreed to the confidentiality agreement. The Intervener Group concluded, based on the evidence of their experts, that there was a low probability that the well would be a good producer and that the productive life of the well would likely be measured in months, rather than years.

With respect to whether Stampede should be given further opportunity to test or produce the well, the Intervener Group said that hydrocarbons likely existed in the 2-34 well. They acknowledged, however, that their views on the quality of the subject reservoir and the future productive capability of the 2-34 well were significantly different from those of Stampede. They believed that the well would be a poor producer (about 3 to 5 m³, or 20-30 barrels, per day) and may need several future workovers, thereby creating further surface impact for local residents to endure. Further, they suggested that the well may not be commercially viable and in their view should be abandoned.

#### 8.3 Views of the Board

The Board notes Stampede's view that it should not be the Board's task to determine the viability of the well and that Stampede believes the well is in the public interest, as it discovered a significant resource. The Board also notes the Intervener Group's view that the well may not be a viable producer. However, the Board recognizes that once an applicant has secured the rights for all intended purposes, acquired a well licence, and drilled a well, an applicant has the right to produce the well. The Board believes Stampede should be afforded an opportunity to determine if the well will be productive and to produce it if it is a viable well. However, the Board must then weigh the right to drill and produce a well against the impacts that may be experienced.

The Board believes that the applicant has demonstrated that it has reasonable evidence to suggest that the 2-34 well has hydrocarbon reserves in place associated with it. The Board makes no determination on the viability of the well. This is for Stampede to determine. Further, the Board believes that similar to other oil and/or gas wells in the Turner Valley field and elsewhere in the province, the well may need future work to sustain and improve its productivity. The Board also recognizes that the quality of a reservoir may have a significant impact on the type and level of future activity around this or any other well. The Board believes that the operator should be granted an opportunity to fully assess the subject reservoir should the Board determine that it be in the public interest to continue the well licence.

#### 9 NEED FOR THE PIPELINE AND RELATED MATTERS

The EUB is responsible for the economic, orderly, and efficient development in the public interest of the energy resources of Alberta. Pipeline applications are required to be submitted in accordance with the Pipeline Act and EUB *Guide 56: Energy Development Application Guide*.

# 9.1 Views of Stampede

While Stampede withdrew its application for a temporary pipeline permit at the opening of the hearing, it discussed the sequence of events related to its various pipeline applications for the 2-34 well.

Stampede explained that it applied for and obtained a permit from the EUB in November 2000 for a temporary, three-month flow line from the 2-34 well to a nearby well operated by Anderson. Stampede noted that it had a verbal arrangement for a five-day test with Anderson through the temporary tie-in at the nearby well. It said that it did not know the licensed H<sub>2</sub>S level for the existing Anderson 14-27 flow line, but had based its application to the EUB on the 2.7 per cent H<sub>2</sub>S applied for in its well licence application. Stampede acknowledged the expiry of the temporary pipeline permit in February 2001 and its subsequent use of the flow line up to July 2001. It indicated that use of the pipeline under an expired approval was an administrative oversight.

In addressing the differences in the  $H_2S$  contents listed in the various applications, Stampede said that it was not aware in November 2000 of the actual  $H_2S$  content of the well and that it used information from other area wells to support the original temporary pipeline permit application of 2.7 per cent. It explained that it relied on recent analysis to support the 4 per cent

H<sub>2</sub>S content in its temporary pipeline application, Application No. 1237635 (withdrawn at the opening of the hearing). With respect to the permanent pipeline application (Application No. 1242414) for 5 per cent H<sub>2</sub>S, it stated that it had used the highest gas analysis observed during completion and testing to that point. It said that the higher H<sub>2</sub>S was related to solution water production and that it expected the solution gas, once the well was on production, would be closer to 2.7 per cent. It noted that the H<sub>2</sub>S content for a nearby Imperial Oil Limited well was about 1.8 per cent.

Stampede indicated that it did not have information on the approved H<sub>2</sub>S content of the pipeline between the Anderson satellite and the battery. It also said that it was not aware whether Anderson had applied to increase the H<sub>2</sub>S content to a higher level, but acknowledged that the records seemed to indicate the line it was tying into was licensed to 3.4 per cent. Stampede said it that had had discussions with Anderson regarding handling production from the 2-34 well and that Anderson had not indicated any regulatory limitations to handling Stampede's production. Stampede said that it was Anderson's responsibility to address changes in its pipeline H<sub>2</sub>S level, if needed. It said it had discussion of tie-in locations and underground piping but did not talk to Anderson specifically about the H<sub>2</sub>S content of gas, oil, and water or the need to upgrade or relicense its system. Stampede said that it did not believe that there would be a need to upgrade the Anderson systems in order to take the Stampede production.

Stampede stated that the 2-34 well was already equipped with a pump, rods, and pumping unit. It stated that all that was necessary in order to produce the well would be to build a pipeline to tie into Anderson's satellite and to remove the surface pipeline. It said that there should be no odours associated with the operation and that the pipeline would be pressure tested.

# 9.2 Views of the Interveners

The Intervener Group acknowledged Stampede's response during questioning that the well was ready to produce and all Stampede needed to do was build the pipeline, hook up the well to the pipeline, and commence production. The Intervener Group recommended that if the Board were to continue the well licence, Stampede be allowed to finish testing the well with no further completion operations and that all testing would be in-line. They further submitted that the in-line testing through the pipeline be allowed for only a period of 30 days, to provide sufficient information to determine if it was in the public interest to allow the well to continue to be produced indefinitely.

#### 9.3 Views of the Board

The Board notes that at the onset of the hearing, Stampede withdrew Application No. 1237635 for the temporary pipeline. Therefore, the Board only has for consideration Application No. 1242414 for the permanent pipeline. The Board is, however, concerned with Stampede's explanation regarding the change in H<sub>2</sub>S content on each subsequent pipeline application.

The Board notes that Stampede acknowledged having discussions with Anderson in July 2001 regarding the handling of the 2-34 well production through a permanent pipeline to Anderson's satellite. The Board also notes that Anderson had not indicated any regulatory limitations to handling Stampede's production. However, the Board understands from evidence put forward during questioning that the only information that Stampede had provided to Anderson was for

the routing of the pipeline, the road crossing location, and the tie-in point to the Anderson satellite.

The Board is aware that Anderson's oil effluent pipeline system is licensed for 3.4 per cent. Therefore, the Board believes that sufficient information may not have been provided to Anderson about the changes in the H<sub>2</sub>S content from the originally expired temporary surface pipeline licence with an H<sub>2</sub>S content of 2.7 per cent to the subsequent change to 4 per cent for the temporary surface pipeline amendment and the later change of 5 per cent for the permanent pipeline. As Anderson may not have been informed of these changes, it may not have been able to determine if there were any regulatory limitations to accepting Stampede's production.

The Board notes that for a period of several days during the in-line testing period, prior to the suspension of the temporary surface pipeline, it is possible that Anderson was accepting 2-34 well effluent with a higher H<sub>2</sub>S content than it was licensed to carry, and this may have placed Anderson in noncompliance with its currently licensed system. The Board has referred this matter to the Applications Branch, Facilities Applications Group, Audit Section, for their investigation.

The Board accepts that to properly produce the 2-34 well, an oil effluent pipeline would be required. The Board notes that the landowner of the lands on which the pipeline is proposed to be located has no objection to the permanent pipeline. Additionally, the Board notes that there was little evidence by the interveners about their objection to the permanent pipeline application other than the submission by the Intervener Group that there be an evaluation of the short-term production from the 2-34 well before allowing continued production from the well. The Board is not prepared to condition any pipeline approval with this restriction.

The Board concludes that there is a need for the pipeline to transport production from the 2-34 well, should it decide to continue the well licence. The Board cannot approve the application for a permanent pipeline to transport fluids with 5 per cent H<sub>2</sub>S into a system currently licensed for 3.4 per cent H<sub>2</sub>S. Approval of the permanent pipeline would be subject to Anderson acquiring the approvals for its system to accommodate Stampede's production. Appropriate facility or system modifications made by either party to ensure compliance with the H<sub>2</sub>S limits of the pipeline system could be an alternative.

# 10 PUBLIC CONSULTATION, COMMUNICATIONS, AND COMMUNITY RELATIONS

#### 10.1 Views of Stampede

Stampede said that it commenced its public consultation program for the 2-34 well in March 2000 and that it used qualified contract professionals to contact residents. It believed that it communicated its project fully to the community and engaged in a dialogue with a number of individuals on finer details of the proposed project. Stampede emphasized that it extended its consultation program well beyond the EUB's minimum requirements and established an EPZ almost double the calculated radius of 871 m. Stampede acknowledged hearing concerns from a number of individuals. It stated that it negotiated with those individuals in good faith and eventually reached an agreement that resulted in a number of commitments being made (see Section 6). However, Stampede said that it believed residents east of Highway 22 were too far

from the 2-34 well to be significantly impacted by its operations. Stampede acknowledged that it did not have a formal strategy for dealing with the public and depended upon a public safety company and its engineering firm to handle matters arising out of this agreement.

Stampede believed that other than some difficulties encountered in formalizing the plans for animal evacuation in the event of an emergency, the drilling operation proceeded uneventfully for the nearby residents. Stampede acknowledged that due to an oversight, residents were not notified prior to commencement of completion operations as per its agreement with the community. In addition, Stampede said it understood that when a resident attempted to contact it regarding flaring on the night of December 9, 2000, no personnel could be located using the telephone numbers in the ERP. Stampede expressed surprise at this but confirmed that it had recently ended its association with the engineering firm representatives listed in its ERP and had not yet updated the plan with names and numbers of its new representatives. Stampede believed this was a minor event, but acknowledged that it may have misjudged the depth of concern in the community, which also resulted in the EUB becoming involved.

Stampede revealed that it had retained the services of a communication specialist from Fresh Start Limited (Fresh Start) early in 2000 to provide an evaluation of the company's performance on another matter and assist with some advice to overcome difficulties it was experiencing in community relations. Stampede indicated it contacted Fresh Start again in December 2000 and asked for its assistance in dealing with the issues raised by nearby residents concerning the 2-34 well. Fresh Start confirmed that it had worked with Stampede in the past to revise the style and content of its correspondence, as well as its public communication methods. Stampede indicated that Fresh Start contacted the residents who had raised concerns but was unable to convince them to meet with Stampede to discuss their issues. Stampede said that it had also agreed to engage in appropriate dispute resolution (ADR), but the residents rejected that as well. Stampede held an open house in August 2001 after further incidents had occurred at the 2-34 well site to share certain information. However, most of the individuals who had raised the issues did not attend the open house. Stampede said that it was disappointed that the interveners and signatories to a petition filed with the EUB did not attend the open house, since it believed that resolution required parties to meet and discuss issues. Stampede commented that one resident had forbidden it to make direct personal contact, and as a result, Stampede was to use the mail as a means of communication.

Stampede indicated that it had received past legal advice at an EUB public hearing not to refute specific allegations made by local residents. That advice, it believed, had harmed its reputation, and therefore it had set out to clearly address issues and allegations by corresponding directly with individuals in this instance. Stampede indicated that while it preferred face-to-face meetings as the best way to address issues, it ended up relying on written correspondence to rebut statements made by interveners, as they would not agree to meet. Stampede acknowledged that when it communicated important information in written correspondence, it often bolded and added several exclamation marks to add emphasis. It explained that when it received feedback from Fresh Start that this style of communication may be considered hostile by the reader, it revised subsequent material. Stampede believed it was important to communicate its view of evolving matters and it posted news updates on the company's Web site. Stampede emphasized its responsibility to keep shareholders up to date concerning the company's business.

Stampede said it would continue to involve communication experts and acknowledged that additional community relation's work was needed. Fresh Start believed any agreements between parties needed to be clear and complete. It said it was necessary for such agreements to be reviewed by the regulator (EUB) for feasibility and safety. It also noted that there was no process built into the agreement to address past and future disputes and noted that EUB staff had committed significant time to Stampede's issues, including the hearing. However, Fresh Start was of the view that participation of EUB staff in the operator-public agreement process and in related open houses would have reduced overall EUB workload.

Stampede acknowledged some failing in its public consultation program back in 1995 when it applied to drill a well at LSD 4-1-19-2W5M near Mrs. Miller's residence. It noted that with respect to Mrs. Miller's experience, its contractor had not adequately carried out the consultation program. Stampede said that it now used a different contractor and would continue to engage a communications expert to improve relations with the public.

#### **10.2** Views of the Interveners

Curlew Lake said that it was a working interest partner in the well. It said that in its view this hearing was about the president of Stampede personally, as well as about communication and process failures.

Curlew Lake stated that Fresh Start was retained to address Stampede's shortcomings and to assist it in evaluating its communications and public consultation programs. Curlew Lake said that the evidence of the communications expert needed to be carefully evaluated and that it believed that it was unbiased. It said that Stampede had been stonewalled in its attempts to communicate with local residents and they should not sit back and refuse to communicate. Curlew Lake noted that earlier in the process the Intervener Group stated that they had no interest in ADR and put Stampede on notice that they would request a Section 42 review if Stampede did not meet its commitments. Curlew Lake believed that the Board allowed the intervener's approach to go too far, and that the pendulum of enforcement had swung too far, resulting in the suspensions. It said that it would welcome direction from the Board for all parties to come together to address issues about the well.

Curlew Lake said that when evaluating Stampede's history, the Board should have regard for the submission of Mrs. Kerluke, in which she reflected that she had a full, open discussion with Stampede. It added that Stampede was trying to address its consultation issues, while the interveners were not interested in open discussion. Although it recognized that Stampede needed to work on its public consultation and address intervener perceptions, it believed that the well licence should be continued.

The Shareholders believed that trust had broken down and the hearing had degenerated into a personal dispute. They said that this must be addressed and believed that the recommendations advanced by Fresh Start should be looked at closely.

The Shareholders said that the situation could have been addressed through a process of mandatory dispute resolution. In their view, there were no real issues other than the breakdown of communications. They said that they supported an ADR process and felt that a hearing should be a matter of last resort.

The Shareholders said the impacts of the various EUB proceedings over the course of testing the 2-34 well had a much larger impact on a small company such as Stampede relative to a major oil company. They said that, for example, decisions by the Board on the approach taken to consider the pipeline permits affected Stampede shares on the stock market. They said the EUB's processes seemed to be at cross-purposes, particularly related to the pipeline permits, and this significantly affected Stampede's share prices. The Shareholders acknowledged that their information was acquired through newsletters on the company Web site.

The Intervener Group said that the story that emerged from this hearing was of a company that "cannot get it right," both historically and in regard to the 2-34 well. They said that Stampede had no production to show for its efforts in the area and that it was a company with limited resources working in a sensitive area in terms of sour gas and population density, which required special care. They added that there was an alarming lack of accountability within Stampede, since it appeared from the evidence that its president was not informed about operations, as exemplified by unawareness of the drilling sump issue.

The Intervener Group referred to *Decision 95-1* on the 4-1-19-2W5M well and asked the Board to the consider if anything had changed since that time. That report noted concerns about Stampede's use of process (well location), previous compliance issues, advanced lease preparation, and discussions with area residents. They said that the Board needed to ask when this type of behaviour was going to change and added that they did not see any evidence of change.

The Intervener Group said that they were troubled by the implication that the situation leading to the hearing was somehow one of its member's fault. They referred to Stampede's letter to the Board as suggesting the objection was frivolous and representative of a minority view. The Intervener Group said that Stampede had put itself in this situation, that its conduct had caused one of the landowners fear and anxiety as a single person living in the country. They believed the landowner did not deserve that kind of treatment from Stampede and that some kind of process needed to be set in motion to address the issues.

The Intervener Group noted the evidence of Fresh Start, appearing as Stampede's witness. They said that it was unfair of the communications expert to suggest that it was disappointing that the landowners would not discuss issues. The Intervener Group disputed Stampede's claims that it was seriously addressing residents' issues through its public consultation and community relations program. They said that there had been no change since 1995 and there was a pervasive impression that Stampede did not accept responsibility for responding to community concerns.

With respect to Stampede's statements and the Shareholders' allegations that the company had been treated unfairly, the Intervener Group said that the Shareholders got their information from Stampede. They pointed out that a major source was the Stampede Web site information. They further said that they had monitored postings on Stampede's Web site and felt that the information created by Stampede was unfair and defamatory. They cited Stampede press releases that suggested its difficulties with the EUB resulted from a local intervener group whose allegations were without merit and referenced a "resident organizer" who was in conversation with the president of another oil company. They believed that the news releases effectively identified one landowner and implied ulterior motives to the landowner's involvement.

With respect to Stampede's comments that it was not allowed to speak to one of the members of the Intervener Group directly, the landowner said that Stampede had tried to contact her at her place of employment, which was unacceptable to her. This landowner had informed Petro Plan that she had instructed Stampede to only contact her by mail at her home address. She said that she was willing to talk to other representatives of Stampede, but not its president.

The Intervener Group acknowledged that they were contacted by Fresh Start and then by the Canadian Dispute Resolution Corporation to participate in ADR. However, they informed these parties that they believed the situation was past the point of mediation. They noted that Stampede had not kept its commitments and, therefore, they had no interest in mediation, adding that they did not feel comfortable with the president of Stampede.

With respect to the potential that the Board would continue the 2-34 licence, the Intervener Group said that they would be willing to participate in mediation provided Stampede did not hire the mediator. They believed that the mediator should be hired by a neutral party, such as the EUB.

The Intervener Group said that they supported mediation in principle, provided both parties committed to the agreed results. They had a concern about responsibility for enforcement when commitments arising from mediation were not met. They further believed it had been a long process to date, with considerable difficulties.

Mrs. Miller said that she had participated in a EUB hearing into a well licence for Stampede in 1995 and was concerned about the ongoing operations of Stampede. She noted that this was the third hearing for Stampede and believed that the causes were related. She believed that Stampede had safety violations and a blatant disregard for the public and EUB requirements. Mrs. Miller believed that the issues were not a public relations matter, but related to safety, competence, and financial capability, and she questioned Stampede's financial capability to handle an emergency response or cleanup. She related this to previous violations in terms of a grass fire and proceeding with lease development without a well licence. She said that trust had been broken and that it was time Stampede was made responsible for its actions. Mrs. Miller said that Stampede should not have its licence continued and should be required to demonstrate its capabilities prior to any further approvals.

Mrs. Kerluke said that she had read all the hearing material and had not objected to the well on the basis of Stampede's commitments. She said that she met with Stampede to discuss how to approach the community during a previous well licence application. She pointed out that the area development plan and Stampede's lands encompassed the area including the mineral lease under her property. She said that Stampede had been cooperative in providing complete information to her.

#### 10.3 Views of the Board

With regard to the early public consultation program conducted by Stampede for the 2-34 well licence application, the Board finds that it was in keeping with the minimum requirements and expectations of *Guide 56*. The Board acknowledges that Stampede voluntarily extended its notification and consultation area to include a larger EPZ to resolve area landowner concerns

about notification and evacuation during an emergency. However, the Board believes Stampede must also have regard for subsequent communication and community relations between Stampede and the local residents once a licence is obtained.

The Board notes that Stampede did not have a formal strategy for dealing with resident concerns. The Board acknowledges that once Stampede observed escalating concerns and deteriorating relations, it requested the assistance of Fresh Start to help in addressing the issues. The Board notes that Stampede also held an open house to provide information to the community and address local issues, which some members of the Intervener Group did not attend

The Board recognizes that in order to resolve some of its earlier issues, Stampede made a number of commitments, but some of these commitments may have been made hastily in response to its need to obtain a licence to drill its well. The Board believes that Stampede did not recognize the importance of certain issues to the community, as evidenced in the miscommunication to adequately provide for trailers and animal care as detailed in its agreement with the interveners. It also had disregard for certain issues expressed by landowners across Highway 22 but within its extended EPZ. The Board believes that Stampede either did not gauge the situation correctly or chose to only do what was minimally required to meet its commitments. The Board believes that Stampede seriously underestimated the concerns of the area residents when residents asserted that commitments had been broken. The Board accepts that Stampede made significant efforts to re-establish a dialogue with the community once it realized its error.

The Board believes that Stampede's failure to fully carry out its commitments or address certain problems, coupled with its previously strained community relationship, led to a loss in the public's sense of trust and confidence. In the Board's view, Stampede failed to recognize that a key element to building and sustaining constructive community and stakeholder relations is providing information, listening to concerns, and then trying to resolve those concerns in a respectful and meaningful manner. Rather than thoughtfully answering questions or concerns, and correcting any misinformation advanced by the residents, Stampede appeared to the Board to refute, rebut, or deny many concerns put before it. The Board believes this positional stance limited the dialogue needed to explore solutions to resolve issues. The Board notes that once concerns had escalated, the area residents declined to engage in an ADR process. For appropriate communication to occur, all parties need to be willing to participate in meaningful dialogue. However, the Board believes that the approach Stampede took, together with the perception of the area residents that Stampede "cannot get it right," led to the polarization. The Board believes proponents need to be aware of these needs and be sympathetic in attempting to understand these needs.

The Board notes Stampede's acknowledgement that it needs significant work in its public involvement processes. The Board also notes Stampede's commitment to develop its internal processes by continued use of communications experts, the hiring of additional resources within the company to address public concerns, and a willingness to continue to address concerns of the area residents. This encourages the Board that Stampede is moving forward in this regard. However, the Board believes that in order to be successful Stampede must demonstrate its corporate commitment to deal with issues and concerns of the community it operates in. The Board expects Stampede to develop and implement procedures to respond promptly and

effectively to concerns and work to cultivate and establish a respectful relationship with the community. Therefore, should the Board decide to continue the well licence on the 2-34 well, and before construction commences on a permanent pipeline, Stampede must develop and submit to the Board a strategic and tactical plan that details how Stampede would deal with stakeholder issues and relations on an ongoing basis. This plan must set out both the procedures Stampede would employ to liaise with the community and where the designated responsibility, authority, and accountability lie within the organization. It is important that the plan identify a representative of the company who can be easily approached to initiate respectful and meaningful dialogue. This plan must eventually be incorporated into the operations management system discussed in Section 11.

As discussed above, the Board believes it is primarily the responsibility of a proponent to initiate, develop, and maintain the appropriate relations with the community it works within. While the Board will assist in facilitating discussion, it intends to continue relying on industry to fulfill its responsibilities in this area. In addition, the Board expects communities to fully participate in an open dialogue with industry so that its issues can be properly identified and addressed on an ongoing basis.

#### 11 OPERATIONS MANAGEMENT

Effective operations management systems are essential for compliance with the intent of regulatory requirements. In simple terms, operations management refers to a system of determining what needs to be done, designating who is responsible, and verifying that necessary actions have been taken.

# 11.1 Views of Stampede

Stampede said if the well licence were continued and if the well were put into production, it would arrange for contract operation of the well, pipeline, and facilities. It said it would likely arrange for a contract operator to visit the well on a regular basis and that Anderson would likely look after everything else. It said that its engineering consultant would develop a list of duties and responsibilities for the contract operator and that the operator would report through its engineering consultant. Stampede indicated that it had not given thought to its management system for handling, incident reporting, and follow-up, among other matters. It said that it would not hire a contract operator that was not cognizant of compliance requirements. Stampede noted that Anderson might request that it be the contract operator for the well and, if this occurred, Anderson's procedures would apply.

Stampede said that it did not have a formal program for inspecting and verifying compliance with its other nonoperating well sites. It stated that it had left that up to its former engineering consultant but had not discussed the matter with its current consultant. It said that it had informal arrangements with an individual who kept an eye on things in the Hartell area on its behalf. With respect to lease cleanup issues, it said that it did not undertake cleanup if it was planning additional activities at a well site. Stampede indicated that once it concluded activities on a lease, it would do the cleanup.

Stampede said that it was a small company consisting of the president, a full-time and a parttime accountant, a corporate secretary, and a receptionist. It stated that it relied on consultants for the balance of its needs. Stampede indicated that its president was ultimately responsible for the actions of the company. Through cross-examination, Stampede indicated that it would be prepared to develop an operations or compliance management system and advise the Board on how the system would work.

#### 11.2 Views of the Interveners

The Intervener Group said that Stampede was a small company with few resources and a long history of run-ins with local residents. They added that there was a lack of accountability within the company, exemplified by Stampede's lack of knowledge of the drilling waste sump at the 2-34 well site. They noted the suspension of Stampede's LSD 4-13-19-2W5M well for ambient air H<sub>2</sub>S concentration exceedances, as well as EUB orders to clean up the lease and subsequent complaints about weeds. They stated that Stampede had received EUB orders to remove liquids from the lease for its LSD 11-9-19-2W5M well and that dust and odour complaints were made regarding Stampede's LSD 10-35-18-2W5M well. The Intervener Group noted that in the case of the latter well, the Board ordered lease remediation, issued a closure order related to lease berms, and noted an unsatisfactory site inspection. They stated that the Board also ordered remediation for a Stampede well at LSD 6-23-20-3W5M, where there had been complaints with respect to weeds and materials washing off the lease. They said that weed control problems were also noted at its LSD 7-25-20-3W5M well.

The Intervener Group stated that issues with the 2-34 well and the poor historical record of Stampede's operations in the area would justify the Board rescinding the well licence. In final argument on behalf of the Intervener Group and in response to questions on the matter from the Board panel, counsel proposed an alternative: should Stampede be allowed to produce the well, this should be conditioned on submission of a management plan to ensure corporate compliance and accountability for review and approval by the Board.

#### 11.3 Views of the Board

The Board believes that issues related to Stampede's noncompliance with its commitments and regulatory requirements are symptoms of inadequacies in the company's system of planning and controlling its operations. While the Board notes that the complaints and noncompliance matters generally are not serious in terms of public safety, the frequency of the issues relative to the limited scope of Stampede's operations is of concern. It appears to the Board that Stampede depends on complaints and regulatory inspections to detect deficiencies in its operations. An absence of an effective proactive approach to controlling drilling and production activities and to detecting and correcting deficiencies and noncompliance has the potential for unacceptable and potentially dangerous consequences.

To ensure compliance with applicable regulations and site-specific conditions, as well as to ensure effective protection of public safety and the environment, the Board expects petroleum industry operators to have effective management systems and processes in place. It is essential, in the Board's view, that senior corporate management direct the development of such systems, make decisions necessary to establish key policies, provide needed resources, and receive feedback on the actual performance of the system.

The Board notes that many models for effective management systems are available from the

business, environmental management, and occupational health and safety disciplines. Such systems are founded on leadership policies appropriate to the size and nature of the organization and that state the organization's commitment for regulatory compliance and performance improvement with respect to business activities, public safety, and environmental protection.

Planning an effective program requires that a company and its leadership investigate and understand potential safety and environmental impacts and aspects of its operations, as well as applicable regulatory requirements. Relevant public commitments need to be identified and understood. This understanding is necessary for establishing management objectives and goals, as well as necessary for the design of a program to achieve them.

Implementation of the management system requires that clear responsibilities and authorities be assigned to qualified parties. The Board views that licence holders are accountable for operations activities and compliance and notes that operators cannot abdicate this responsibility to contractors in the absence of due care and control. It is expected that when responsibilities are assigned to staff or contractors, operators exercise suitable control to ensure that these parties are competent and have the resources to undertake those responsibilities. Effective implementation further requires the development of key procedures and provisions for communication of those procedures to staff and contractors. It also provides for ongoing and timely communication and consultation with the affected public and other stakeholders. These key procedures include adequate emergency response plans.

Effective monitoring, including, routine operations checks, periodic inspections, and system audits and reviews, are necessary in any management system to verify that what has been planned is actually accomplished. It is essential that effective and responsive procedures are in place for reporting incidents and noncompliance events, investigating causes, and ensuring that mitigative measures are completed.

The Board believes that corporate management must be informed about the performance of its management system through analysis of monitoring results, incident investigations, and audits. It is essential that leaders participate in the management system review to gain understanding of weaknesses and opportunities to direct improvements in the management system.

The Board believes that the management system elements discussed above need to be tailored to the scope, complexity, and risks of upstream petroleum company activities. Such systems need to be clear, documented, and communicated to be effective. Smaller operators benefit from fewer, often less complex facilities and short, direct lines of communications; they can achieve significant improvements even with relatively simple systems.

The Board is not convinced that Stampede has adequately addressed its compliance management processes. Examples and issues raised during the hearing point to inadequate assignment of responsibilities, problems with communication of important commitments, and a lack of adequate inspection, as well as questions with respect to Stampede's ability to learn from incidents and implement measures to prevent repeat situations. Therefore, assuming the Board continues the well licence, it will require that Stampede develop a suitable system and demonstrate its effectiveness through an independent third party. The Board expects this plan to apply to all of Stampede's existing well operations and any future wells it may have.

The Board will expect that Stampede submit to it a report explaining its operations and compliance management system within 12 months of the date of this decision. The report shall include a qualified third-party assessment of the management system and an audit of Stampede's operations for regulatory compliance. Stampede shall also submit a terms of reference for its proposed management system and audit within 4 months of the date of issue of this decision.

#### 12 FUTURE OPERATIONS

# 12.1 Views of Stampede

Stampede discussed a sequence of operations it expected to occur at the 2-34 well. It indicated that it would purge and remove the temporary pipeline at the earliest opportunity. Provided an approval was issued by the Board, Stampede intended to construct a permanent pipeline from the 14-27 surface location to the Anderson satellite. It indicated that as the 2-34 well was ready to be placed on production, it would perform a pressure test of the new pipeline and then use the downhole pump to recover the remainder of the load water. A contract operator would be engaged to operate the well once regular production was realized.

During cross-examination, Stampede acknowledged that production volumes and hours in the EUB's records on its 2-34 well were inconsistent with its daily reports. While it undertook to provide additional records to the Board to clarify the situation during the hearing, it eventually agreed to engage in a production audit to ensure the accuracy of the EUB's record. Stampede also stated that once the well delivered sustained daily production, it intended to outsource the production accounting function rather than continue to file reports directly with the EUB.

Stampede committed to electrifying the pump on site, but also acknowledged that more noise assessment work would have to be done. Stampede said that it would finalize power supply with Utilicorp, which required a long lead time. It said it would take four to six weeks for electrification of the lease, while only a two-week period would be required to use a gas engine to power the pump. However, Stampede said that electrification would be its preferred approach out of consideration for residents.

Stampede re-emphasized that no on-site flaring would occur during production operations. It acknowledged that some additional flaring may occur at the Anderson facility.

In response to community questions about other operations that might occur at the 2-34 well, Stampede indicated that it had no plans for additional drilling, including sidetrack, horizontal, or deepening of the 2-34 wellbore. It also confirmed that it had no other zones of interest to evaluate in the well and that no recompletion of other zones would occur.

Stampede did not initially rule out additional reservoir stimulation procedures, such as acidizing or fracturing, being used on the well. However, it eventually reconsidered its responses and expressed certainty that no such operations were contemplated, nor would they be performed on the well

Stampede indicated that it had attended one meeting of the Quirk Creek Gas Processing Community Committee and would attend others in an effort to engage more fully in the community. Stampede suggested that the Board involve its own mediators to discuss and deal with issues that might arise from the operations of this well.

#### 12.2 Views of the Interveners

The Shareholders stated they believed that the company needed to grow from an organization focused on exploration to one conducting production operations and that a public relations plan should be in place. It suggested that the Board appoint a liaison officer or ombudsman to investigate and evaluate allegations and to ensure that parties communicate appropriately with a view to resolution, rather than doing so through the EUB's hearing process.

The Intervener Group submitted that it had already endured excessive completion and testing operations at the 2-34 well and believed that the Board should restrict further operations at the well so as to limit the potential for "incidents" that could negatively impact the community. The Intervener Group further suggested that Stampede should only be allowed to produce the well after the Intervener Group evaluated further test results and made submissions to the Board on the merits of whether production should be allowed.

# 12.3 Views of the Board

The Board expects the temporary pipeline to be removed as soon as possible and in accordance with the appropriate regulations. The Board expects Stampede to meet the noise guidelines and notes its commitments to electrify the 2-34 well site. However, should it produce the well prior to electrification of the site, the Board also expects Stampede to take appropriate measures to mitigate any noise impact.

The Board notes Stampede's difficulties in responding to questions regarding the apparent discrepancies in the production volumes and hours recorded on the EUB's production record on the 2-34 well as compared to the daily reports and completion reports on the well. As a result, the Board is referring the matter to its Compliance and Operations Branch, Production Audit Group, for a review to ensure that appropriate and accurate production reporting is occurring on the well.

The Board is concerned about Stampede's commitments made to not acidize or fracture the well and to never perform additional drilling operations on the 2-34 well. The Board acknowledges that additional drilling operations, particularly the sidetracking that was discussed at the hearing, would be the subject of separate future applications and are not discussed further at this time. However, with regard to acid and fracture treatments, while the Board acknowledges that Stampede maintains it has no immediate or foreseeable plans to conduct these, to eliminate use of these reservoir stimulation techniques to improve production is a concern. The Board is concerned that Stampede may limit its possible solutions to improve production from the 2-34 well by suggesting it would avoid certain conventional procedures. To suggest with certainty that Stampede, or any operator, would never entertain this operation may potentially create another commitment that may not be satisfied and to create another instance where the communities' expectations are in conflict with what should be a relatively normal course of operations at a well. In that regard, the Board would not be prepared to condition the licence in this regard, but would expect Stampede to discuss ongoing operational needs with local residents. Further, the EUB has a conservation mandate and does not believe it to be in the broad public interest to restrict such activities as long as they can be conducted without significant impacts on local landowners.

The Board notes Stampede's limited involvement to date in the Quirk Creek Gas Processing Community Committee and would strongly encourage its participation in this and other similar groups. It has been the Board's experience that industry and the community benefit from the information exchange, discussions, and good relations that occur in these stakeholder groups throughout the province.

The Board notes the comments of Stampede and the Shareholders for the Board to become involved by assigning a liaison officer or ombudsman, for example, when relationships between industry and the public are strained. The Board does not see the need for an EUB liaison officer as proposed, since the EUB places the onus on industry to address concerns or trigger the regulatory process when the parties cannot resolve their differences.

#### 13 DECISION

On the basis of the overall findings, the Board concludes that it is in the public interest to continue the 2-34 well licence. The Board also provides for the approval of the pipeline with certain conditions

In the course of the hearing, the Board identified three areas of concern about which it had referred investigations back to the appropriate EUB work groups to determine if regulatory requirements were met. The issues were the sump and drilling waste materials on the 2-34 well site, the apparent incompatibility in the  $H_2S$  content of the Stampede production versus the Anderson system, and the inconsistencies when comparing various documents on production reported for the 2-34 well. In each instance, the Board expects the appropriate work group at the EUB to gather the required information and complete a review on the matters identified. The Board asks that the results of those investigations be shared with interested hearing participants to ensure a transparent process.

Pursuant to the provisions of Section 42 of the ERCA, the Board hereby varies Well Licence 0239741 by attaching the following conditions:

- Prior to commencing operations at the well, Stampede must submit to the Board for approval a strategic and tactical plan outlining its public consultation/community relations program, as described in Section 10.3, and obtain the Board's approval of the program.
- Within four months of the date of this report, Stampede must submit to the Board for approval a terms of reference for its operations and compliance management plan, as discussed in Section 11.3. Further, Stampede must develop and then submit an appropriate operations and compliance management plan developed from the terms of reference within one year of the date of this report, as well as an independent third-party audit of its management system and the regulatory compliance of its facilities.

The Board is prepared to approve Application No. 1242414 for a licence to construct and operate a sour oil effluent pipeline from the 2-34 well subject to the following conditions:

• Anderson must obtain the appropriate approvals to accommodate Stampede's production into its system, or either party must make appropriate facility or system modifications to

- ensure compliance with the H<sub>2</sub>S limits of the pipeline system.
- Prior to the construction or operation of the pipeline, Stampede must submit to the Board a strategic and tactical plan outlining its public consultation/community relations program, as described in Section 10.3, and obtain approval of the program.

Issued at Calgary, Alberta, on December 20, 2001.

#### ALBERTA ENERGY AND UTILITIES BOARD

<Original signed by>

H. O. Lillo, P.Eng. Acting Board Member

<Original signed by>

G. A. Atkins, D.V.M. Acting Board Member

<Original signed by>

N. G. Berndtsson, P.Eng. Acting Board Member