

# Draft Minutes



## ***Flaring and Venting Project Team meeting #51***

Date: Thursday, March 11, 2010  
 Time: 10:00 am – 3:30 pm  
 Place: CASA, 10<sup>th</sup> Floor, 10035 108 Street, Edmonton

### **In attendance:**

<b>Name</b>	<b>Stakeholder group</b>
Andrew Higgins	CAPP/CNRL
Wayne Hillier	Husky Energy
Randal McNeill	Husky Energy
Jim Spangelo	Alberta Energy Resources Conservation Board
John Squarek	Small Explorers and Producers Association of Canada
Chris Severson-Baker	Pembina Institute
Jolene Shannon	Pembina Agricultural Protection Association
Anna Maslowski	Alberta Energy
Krista Phillips (by phone)	CAPP
Randy Dobko	Alberta Environment
Robyn Jacobsen	CASA Secretariat
Petra Rowell	CASA Secretariat - support

### **With regrets:**

<b>Name</b>	<b>Stakeholder group</b>
James Vaughan	Alberta Energy Resources Conservation Board
Bob Barss	Alberta Association of Municipal Districts and Counties
Karina Thomas	Alberta Health and Wellness
Ian Peace	RAPID

### **Guests:**

<b>Name</b>	<b>Stakeholder group</b>
Colby Ruff	Alberta Energy Resources Conservation Board
Curtis (by phone – until 10:30)	Golder and Associates

Andrew Higgins chaired the meeting, which convened at 10:00 a.m. Quorum was achieved.

### **Action Items:**

	<b>Who</b>	<b>Due</b>
41.1: Distribute aggregate information on fugitive emissions once it is available. <i>Team agreed this information is still needed.</i>	Krista Phillips	March 25 <sup>th</sup> meeting (#52)
47.2: Evaluate the impact of reducing 6 month testing/tie-in period in the heavy oil areas for anything in production in 2008 at Husky: Added: <i>“Provide data on the number of wells, volumes for sites that ultimately do conserve, and the value of reducing tie-in from 6 to 4 months”.</i>	Wayne	Carry forward.
51.1: ERCB will provide a list of companies with batteries and wells contributing to the increases from Feb to Mar 07. Krista will follow-up with three companies that contributed to the increase, collate responses, and identify chronic issues behind the increases.	James & Krista	Update - March 25

51.2: Add a draft recommendation regarding flare emissions from flaring with non-hydrocarbon liquid, for further discussion. Check if there was any implementation of the action coming out of 2004 report.	Robyn	March 25
51.3: ERCB will seek direction from their board on their role and if the team can take more time to flesh out issues for the report.	James	March 25
51.4: As there is currently a requirement for this to be reported in this manner, ERCB will report back to the team in September on what they intend to do about combustion products (such as nitrogen or CO2) being reported in ST60B.	James	Fall meeting?
51.5: Everyone to review the flaring and venting alternatives table and provide Wayne with any additions, deletions or clarifications before a final version is included in the team report.	All	

### 1) Administration

- a. Approval of the agenda: The meeting agenda was approved by consensus with the switch between item #3(update from ERCB) and #4 (update from Golder).
- b. Approval of the minutes from the previous meeting: Minutes of the January 15, 2010 meeting (#50) were approved by consensus with the following corrections noted:
  - page 5 - should be m<sup>3</sup>, not cm<sup>3</sup>
  - page 6 – text should make it clear that conservation infrastructure has been put in place for the Shell project only.
  - Action item 50.1 – data review; CAPP and ERCB is sorting out who will do what.
- c. Action items follow-up: The action item list from the previous meeting was reviewed as follows:

Action items	Who	Due
41.1: Distribute aggregate information on fugitive emissions once it is available. <i>Team discussed and agreed this information is still relevant and needed.</i>	Krista Phillips	Carry forward
44.7: Prepare a brief report on each battery flaring alternative, including a classification based on technical feasibility and commercial viability.	Wayne	Done. On agenda.
47.2: Evaluate impact of reducing 6 mth testing/tie-in period in heavy oil areas for anything in production in 2008 at Husky. Provide data on number of wells, volumes for sites that ultimately do conserve, and the value of reducing tie-in from 6 to 4 months”.	Wayne	Carry forward.

48.6: Make a list of the top 50 batteries and wells (in Figure 5) that were responsible for (a) the increases from Dec/07 to Jan/08 and (b) the decreases from July to Aug/08. The ERCB will forward this information to <b>industry reps who will investigate possible reasons.</b>	Krista	Done.
<ul style="list-style-type: none"> <li>- Dec/07 to Jan 08. The ERCB has tracked it down to the Nexen Long Lake batter. The team agreed that this was due to an upset condition during start-up (non-routine) and is not a FVPT issue.</li> <li>- July to Aug/08. The ERCB has determined that this decrease was to due to how well tests were defined, not a problem with data.</li> </ul> <p><b>Action Item 51.1: ERCB will provide a list of companies with batteries and wells contributing to the increases from Feb to Mar 07. Krista will follow-up with three companies that contributed to the increase, collate responses, and identify chronic issues behind the increases.</b></p>		
49.4: Estimate what actual increases in conservation the straw dog proposals might result in. <b>**See notes below.</b>	James	Done
49.5: Consider amendments, additions, and alternate proposals for the straw dog recommendations and forward their comments to Robyn and/or Jennifer Allan. <b>- No comments received. Straw dog has been updated based on Jan. meeting.</b>	All team members	Done.
49.7: Coordinate funding to hire the report writer.	Robyn	Done.
50.1 Dec 07 to Jan 08 and decreases July to Aug 08 to CAPP. CAPP will then contact companies and collate responses and identify chronic issues behind the increases.	Jim, James, Krista	See new Action Item 51.1
50.2: Team members to send their comments on the draft Golder report to Jennifer to compile, circulate, and provide to Golder.	All team members	Done.
50.3: Co-chairs continue to get progress updates from Golder via teleconferences Jan 29 and Feb. 12 (9:00 am start).	Co-chairs	Done.
50.4: The ERCB team members will seek advice from their board members and bring back advice to the team for the next meeting Feb. 18.	James, Jim	Done. On agenda.
50.5: Present preliminary 2009 flaring and venting trend data to the next team meeting. <b>**See notes below.</b>	James, Jim	Done.
50.6: Products of combustion underground should not be included in venting. Jim to draft a straw dog recommendation and provide to Jennifer. <b>- Included in the last page of the straw dog (pg. 5)</b>	Jim	Done.
50.7: The team will review the <i>RFP on Flare Emissions from Flaring with Non-Hydrocarbon Liquid</i> handed out at the meeting and provide comments to Jennifer by next Friday.	All	Done.
<p><i>- No comments were received..</i></p> <p><b>Action Item 51.2: Adds a draft recommendation regarding flare emissions from flaring with non-hydrocarbon liquid, for further discussion. Check if there was any implementation of the action coming out of 2004 report.</b></p>		

**Action Item 49.4 **\*\*to be verified by ERCB\*\*****

Crude Oil

- For crude oil batteries, if we set a provincial rate of 98% conservation efficiency and/or limited the flare volume to 214.10 E3M3, the volume of flaring and venting could decrease from 390.720 E6M3 to 261.355 E6M3 per year.
- If we set a minimum 98% conservation efficiency for all crude oil batteries, conservation could increase from 326.017 E6M3 from 390.720 E6M3 per year.

Bitumen

- For bitumen batteries, if we set a provincial rate of 90% conservation efficiency and/or limited the flare volume to 202.5 E3M3, the volume of flaring and venting could decrease from 336.4 E6M3 to 179.4 E6M3 per year.
- If we set a minimum 90% conservation efficiency for all bitumen batteries, conserve could increase from 258.215 E6M3 to 336.355 E6M3 per year.

**Action Item 50.5 **\*\*to be verified by ERCB\*\*****

ERCB Preliminary data provided for solution gas flaring and venting (bitumen and oil):

<b>2009</b>	Volume = 653 E6M3	Conservation Rate = 95.3%
<b>2008</b>	Volume = 727 E6M3	Conservation Rate = 95.1%
<b>2007</b>	Volume = 675 E6M3	Conservation Rate = 95.8%
<b>2006</b>	Volume = 693 E6M3	Conservation Rate = 96.0%
<b>2009</b>	Volume = 662 E6M3	Conservation Rate = 96.3%

**2) Update on Golder Project**

Golder provided an update on their report. It has taken a little longer to get information on the economic impact of stranded oil and to verify the information with producers. They expect to produce the next draft over the weekend, and distribute the report mid to end of next week. Golder thanked everyone for being responsive and patient as they add on this aspect of the report.

**3) Update from ERCB**

ERCB expressed some frustration with where the process is at. They went back and talked to their senior management. Their direction is that they will not make a statement regarding their viewpoint on the status quo if the team's report is non-consensus. They will assist with preparing the final report, but can not provide a non-consensus position. Then will provide the report to the ERCB board to decide on next steps.

A general discussion then followed about the process forward. It was stated that any stakeholder holding back their viewpoint undermines the CASA consensus process. There were some comments about the regulator's role in a consensus process to provide the motivation/impetus for parties to come together. This issue will be identified and discussed at the CASA board meeting on March 24.

During a round table discussion, some members commented that the upward trend in flaring and venting is not acceptable. The team needs to have a better understanding of this trend . . . is it due to non-routine issues? The ERCB also indicated that, due to the Shell conservation scheme and a decrease in activity, there would likely be no increase in venting in 2010.

There was general agreement around the need to strive for continuous improvement, although it is getting tougher technically and economically. Smaller projects are constrained by the economics. There was a suggestion to include the value of oil in the calculation.

There was also a suggestion to re-consider government initiatives and tools, such as GHG off-sets. Some members felt that an off-set protocol is not a fix for a regulatory issue – the off-sets protocol is a voluntary program that rewards companies for going above and beyond the regulatory requirements. Others felt that the off-sets protocol could be complementary to the regulation. I.e. Off-sets help to improve economics and potentially increase conservation for wells between 900 m3 and 500 m3.

It was identified that more time for more analysis is required. ERCB will ask if their board requires the report ASAP or if more time can be taken. There was also a question of who represents the ERCB at the CASA board.

***Action 51.3: ERCB will seek direction from their board on their role and if the team can take more time to flesh out issues for the report.***

#### **4) Recommendations**

There was a suggestion from one of the members to draft a recommendation that says:

*Flaring and venting in the province must be reduced by XX% from 2008 levels by 20XX or XXX regulatory backstop will be enforced.*

It would be up to industry to figure out how to make the reductions.

The morning's discussions led to a new "straw dog" summarized on flipcharts by the NGO co-chair including the following points:

- Lower the flaring and venting volume limit (currently 900 m3/day) to the technical limit. We don't know this number and would need to investigate, but it could be somewhere around 500 m3/day.
- Employ economic exemption for low productivity oil wells (include oil and gas value in rate of return on investment economic analysis). This is for single wells only: have different rules for multi-well and in-situ operations. Also need to address the difference between small and large projects: evaluate oil conservation, gas conservation, and cost to conserve. Do NPV for two case scenarios: if differential between the two falls within a certain range, then have to conserve.
- Look for opportunities to reduce non-routine flaring and venting and identify a plan to pursue these.
- Look for ways to shorten the tie-in and test period.
- Do further research on reducing technical limits.
- Examine opportunities to reduce volumes for natural gas well testing.

The team then reviewed the straw dog recommendations drafted by the secretariat and made the following points:

#### **Recommendation 2a. Modify the economic analysis by adjusting the NPV level.**

The team discussed adding that this amount be adjusted in conjunction with the update of D60 in accordance with the Consumer Price Index using 2006 as the base year).

**Recommendation 2b. Modify the economic analysis by requiring a greater number of wells to conduct economic analysis.**

The team discussed that this information available to the next team before they start. In recognition of the cost, use a sampling approach.

**Recommendation 3: Conduct research needed to define lower technical limit of gas conservation.**

The team discussed that a working group should prepare this work prior to the next project team starting its work. The recommendation should be split into two separate projects.

**Recommendation 4: Reduce testing and tie in period for:**

- a. Duration of Well Testing and Tie-In for Heavy Oil**
- b. Duration of Testing for gas wells**

*There is no agreement on a recommendation regarding testing and tie-in.*

The FVPT discussed a new recommendation that would result in industry developing a Best Management Practices guide for testing and tie-in. There were comments that the team would have to ensure that the BMPs were not interpreted as regulatory requirements.

**Recommendation 5: Reconvene FVPT to evaluate potential to further reduce flaring and venting – when info is available from economic analysis and studies on lower technical limit.**

The team discussed changing the date of when it reconvenes.

**Recommendation 6: Where combustion is occurring in underground reservoirs, combustion products (such as nitrogen or CO<sub>2</sub>) should not be reported in ST60B.**

*Action 51.4: As there is currently a requirement for this to be reported in this manner, ERCB will report back to the team in September on what they intend to do about this.*

## **5) Final Report**

The project team table of contents (TOC) was circulated to the team. Robyn walked everyone through the major sections and asked for feedback.

## **6) Battery Flaring Alternatives**

Industry provided a matrix of battery flaring alternatives (e.g. fuel cells, micro-turbine generators) based on whether they are technically feasible and/or commercially viable, or technically or commercially not proven for Alberta's conditions on small well battery projects. This was provided for information only but was agreed it should be included as an appendix in the report.

*Action 51.5: Everyone to review the table and provide Wayne with any additions, deletions or clarifications before a final version is included in the team report.*

## **7) CASA Board Meeting, March 24**

A FVPT Status Report for the March 24 CASA Board was reviewed by the co-chairs and submitted in the CASA board meeting briefing binder. Status reports are not usually discussed at board meetings but there

is time for members to ask questions. The ERCB issue will likely be discussed and Robyn will bring back to the team any directions received from the board.

**8) Next Meeting Date**

<b>Date</b>	<b>Time</b>	<b>Place</b>
March 25	10:00	Calgary

**9) Adjournment – The meeting was adjourned at 3:30 p.m.**