# Minutes



# Flaring and Venting Project Team meeting #41

Date: Tuesday, April 29, 2008

Time: 10:00 - 3:00 pm

Place: CASA Office, Edmonton

#### In attendance:

Name Stakeholder group

Andrew Higgins CAPP/CNRL

Carolyn Kolebaba (via phone) Alberta Association of Municipal Districts and Counties

Chris Severson-Baker Pembina Institute

Ian Peace Residents for Accountability in Power Industry Development

James Vaughan Alberta Energy Resources Conservation Board

Jeff Cormier Alberta Energy

John Squarek Small Explorers and Producers Association of Canada

Jolene Shannon Pembina Agricultural Protection Association
Krista Phillips Canadian Association of Petroleum Producers
Michael Brown Alberta Energy Resources Conservation Board

Mike Zemanek (joined after lunch) Alberta Health & Wellness Ralph Smith Wildrose Agricultural Producers

Randy Dobko Alberta Environment
Robyn Jacobsen CASA Secretariat
Rudy Sundermann CAPP/EnCana
Shannon Hiebert CAPP/Husky

## With regrets:

Name Stakeholder group

Barry Ranger Small Explores and Producers Association of Canada

Danielle Moffat Alberta Energy

Doreen Rempel Canadian Society for Unconventional Gas/MGV Energy Inc.

Len Vogelaar Alberta Beef Producers

#### **Guests:**

Name Stakeholder group

Kerra Chomlak CASA

Sharon Pederson Energy Resources and Conservation Board

Carol Nykolyn Alberta Energy

Chris Severson-Baker chaired the meeting, which convened at 10:00 a.m. Quorum was achieved.

# **Action Items:**

Action items	Who	Due
39.3 Explore the interest of the Alberta Beef	Robyn Jacobsen	Update at next meeting
Producers (current representative is Len Vogelaar).	Robyn Jacobsch	opulate at next meeting
40.13 Invite Matthew Johnson to come and do a	Randy Dobko	Update at next meeting
presentation on flaring research for the team.	Rundy Booko	epatie at next meeting
40.15 Follow-up with ARPC on the	Randy Dobko	On-Going
implementation of the teams' recommendations.	Tunay Books	
41.1: Confirm that aggregate information on	Krista Phillips	Next meeting
fugitive emissions can be shared with the team.	Time Timeps	Treat meeting
41.2: Provide information on the implementation of	Krista Phillips	Next meeting
fugitive emissions management plans.	1	
41.3: Provide information on on-going research,	Randy Dobko	ASAP. (Robyn will
including a link to PTAC research.		distribute to the team.)
41.4: Scan mercury emissions information and	Robyn	ASAP
post it on the website.		
41.5: Provide the team with:	Michael Brown	Next meeting
<ul> <li>Total flared and vented volumes compared to</li> </ul>		_
last year.		
<ul> <li>Flared and vented volumes as a percentage of</li> </ul>		
total production.		
41.6: Review Q1 data for Bitumen Solution Gas	James Vaughan	Next meeting
to see if the sharp drop is re-occurring.		
41.7: Modify "flaring & venting volumes" tables	Michael Brown	Next meeting
to show actual volumes and provide a description		
of the battery types.		
41.8: Distribute a well test audit data table that	Michael Brown	Next meeting
includes:	(Send to Robyn.	
<ul> <li>The number of well tests per year.</li> </ul>	Robyn to send to	
<ul> <li>Average time of flaring by well type.</li> </ul>	team.)	
41.9: Develop a proposal about what was	Michael Brown	Next meeting
intended by the well test reporting requirement.		
41.10: Develop a scope for a full cost report, a	Ian, Chris, Mike,	Next meeting
workplan, and a budget, for review by team.	James, Andrew,	
	and Krista	
41.11: Poll the sub-group for meeting dates after	Robyn Jacobsen	ASAP
May 20.	D I I I	AGAD
41.12: E-mail the website link to the 2003 report.	Robyn Jacobsen	ASAP
41.12: Develop workplan and budget for	Rudy, Mike,	Next meeting
reviewing new and emerging technologies.	Randy	NY
41.14: Review the information collected by	Krista Phillips	Next meeting
CAPP and update the team on the ease of		
separating routine from non-routine flaring.	D 1 I I	ACAD
41.15: Update the workplan as per the team's	Robyn Jacobsen	ASAP
discussion.	D.1 I 1	ACAD
41.16: Poll for dates for the next meeting.	Robyn Jacobsen	ASAP

### 1) Administration

- a. Introductions.
  - Carolyn Nykolyn was introduced as the new representative from Alberta Energy. Jeff Cormier will be stepping down.
- b. Approve Agenda and Meeting Objectives
  - o The meeting objectives were amended to:
    - Receive an update from ERCB on data gathering activities.
    - Decide on additional information needs.
    - Review and adjust workplan/timeline.
  - The team also added some time during lunch to recognize Martha Kostuch and her contributions to the team.
  - Agenda approved by consensus.
- c. Review and approve minutes from meeting #40
  - Jolene Shannon's organization was changed to Pembina Agricultural Protection Association.
  - o Any reference to the EUB was changed to ERCB.
  - The Minutes from Meeting #40 were approved with the amendments.
- d. Review action items from Meeting 40
- **39.3** Explore the interest of the Alberta Beef Producers (current representative is Len Vogelaar).
- Carry forward
- Robyn contacted Len but did not hear from him before the meeting.
- **39.5** The Project Manager will investigate the recruitment of a municipal government representative for the Team.
- Done
- **39.10** "Advance" quarterly reports of the flaring and venting statistics will be provided to the Team.
- Done. Presentation today Agenda Item #2.
- **40.1** A revised Terms of Reference will be distributed for the team's final review and sign-off. (Deadline for briefing book is Feb 22).
- Done
- **40.2** Secure time on the agenda of the March Board Meeting for the presentation of the Terms of Reference.
- Done
- **40.3** Draft a slide to be added to the presentation for the Board meeting regarding the facilities and activities that are outside of this team's mandate.
- Done
- **40.4** Gather information from ERCB reporting to provide the team with updated statistics.
- Done. Presentation today Agenda Item #2.

- **40.5** Follow-up with the CAPP consultant to see what information they can provide on Sour Gas dehydrators in Alberta.
- Done.
- CAPP collects this information, but doesn't distinguish which dehydrators are sour gas.
- Discuss further action Agenda Item #4.
- **40.6** Contact Alberta Energy for updated information on Otherwise Flared Solution Gas Royalty Waiver Program
- Done. Presentation today Agenda Item # 3
- **40.7** Follow-up with ERCB to find out if they have data regarding routine vs. non-routine flaring.
- Done.
- There is no distinction. Should we try to address non-routine flaring differently from routine?
- Discuss further action Agenda Item #4.
- **40.8** Follow-up with CAPP members to find out if they have data regarding routine vs. non-routine flaring.
- Done.
- Members are required to report flare volumes, but don't distinguish. They are working to improve reporting.
- Discuss further action Agenda Item #4.
- **40.9** Gather data on fugitive emissions as it is submitted to CAPP/becomes available from Environment Canada.
- Done.
- Fugitive emissions were not reported in March 2008, but CAPP has recommended that the 2009 report include fugitive emissions.
- Action Item 41.1: Krista will confirm that aggregate information on fugitive emissions can be shared with the team.
- Action Item 41.2: Krista will provide information on the implementation of fugitive emissions management plans.
- **40.10** Investigate with the ERCB to find out if it is feasible to differentiate between conventional and unconventional sources of flaring.
- Done. Presentation today Agenda Item # 3
- **40.11** Find out more about getting an update to the 2003 economic analysis entitled "Solution Gas Flaring and Venting in Alberta".
- Done.
- The consultants who did the original report are no longer employed with the same company (Ron Schmidt and Saad Rahim).. We will have to hire new consultants to update the report.
- Discuss further action Agenda Item #4.

- **40.12** Get a report on the activities of the ARPC regarding research on the relationship between gas composition and combustion efficiency.
- Done.
- ARPC has been working on a projects related to:
  - o Modelling/simulating sour flares.
  - Assessing and quantifying soot formation during flaring.
  - o The efficiency of flaring related to greenhouse gas emissions.

# Action Item 41.3: Randy will provide information on on-going research, including a link to Petroleum Technology Alliance Canada (PTAC) research. Robyn will distribute to the team.

- **40.13** Invite Matthew Johnson to come and do a presentation on flaring research for the team.
- Carry forward.
- The team provided some guidance on what they wanted Matthew to present.
  - o Information on the research that has been done to date, new findings, and future directions. (Including cross-jurisdictional information.)
  - Work that has been done on setting standards.
  - o Information on measuring combustion efficiency in the field (if any).
- **40.14** Distribute the completed research on mercury emissions.
- Done
- Information was provided in hard copy. It was noted that much of the information is anecdotal and not substantiated.

# Action Item 41.4: Robyn will scan the mercury emissions information, post it on the website, and sent the team the link.

- **40.15** Follow-up with ARPC to get a report on the implementation of the teams' recommendations.
- On-going. Some of the recommendations have been moved forward due to the research projects listed in Action item 40.12.
- **40.16** Update Summary of the Implementation of Recommendations from the Flaring and Venting Project Team and include in presentation to CASA Board.
- Done. The summary was updated but not presented to the board. The next report to the board is not specified.
- **40.17** Distribute Global Voluntary Standards to team.
- Done.
- **40.18** Talk to the CAPP technical team on Flaring and Venting about including a full-cost study in the "Solution Flaring and Venting in Alberta" report update.
- Done.
- It was noted that doing a full-cost analysis may be bring the unintended consequence of discouraging conservation, due to economics..
- Discuss further action Agenda Item #4.

**40.19** Draft a workplan and distribute to the team.

- Done.
- e. Update from March 25 board meeting
  - Chris presented the revised terms of reference to the CASA board and they were approved.

## 2) ERCB Update

- The ERCB gave a presentation on Preliminary Alberta Provincial Flaring and Venting Statistics for 2007.
- It was noted that this was preliminary data and there hadn't been much analysis.

#### *Highlights of the presentation*

- Solution gas flaring was at an all time low.
- Solution gas venting has increased.
- Well test flaring has decreased.
- It was felt that economics was having the biggest effect on flaring and venting volumes, due to the decrease in the cost of gas and the increase in the cost of labour.
- It was also felt that Directive 60 was having a positive impact.

#### Points raised in discussion included:

- Clustering of well pads is a part of management plans for conserving gas, but not really for flaring and venting. There is definitely a push to multi-well pads for better economics.
- The decrease in well test flaring could be correlated to the decrease in drilling.
- It was noted that if the decrease in flaring is actually being driven by less production, this is not necessarily good news. However, flaring decreased more then production, so there is still some good news.
- Venting volumes have increased, while production has decreased. This may be due to an increase in the number of older wells. These wells usually have less production, which means they vent, instead of flare.

#### **Action Item 41.5: Mike will provide the team with:**

- The total flared and vented volumes compared to last year. (Rough table was completed during the meeting – see below)
- Flared and vented volumes as a percentage of total production.

FLARING	2006	% of total	2007	% of total
Solution gas/	343,000	39.8	306,000	43.1
conventional oil				
Solution gas/bitumen	39,000	4.5	24,700	3.5
Well Tests	301,000	34.9	205,000	28.9
Gas Batteries	28,000	3.3	24,500	3.5
GGS	28,300*	3.3	28,300	4.0
GP	122,100*	14.2	122,100	17.2
Total	861,400		710,600	

<sup>\*</sup>Assumed, not recorded.

VENTING	2006	% of total	2007	% of total
Solution gas/	105,000	30.1	127,600	31.7
conventional oil				
Solution gas/bitumen	201,000	57.6	239,000	59.3
Well Tests	5,000	1.4	4,400	1.1
Gas Batteries	30,000	8.6	24,000	6.0
GGS	5,100*	1.5	5,100	1.3
GP	2,700*	0.8	2,700	0.7
Total	348,800		402,800	

<sup>\*</sup> Estimated

• The sharp drop in the Bitumen Solution Gas Trends 2007 table is due to seasonal drilling.

# Action Item 41.6: The ERCB will review the preliminary Q1 data to see if the sharp drop is re-occurring.

- There were some concerns about quality control. It was indicated that there is a certain level of trust that the companies are providing valid information. ERCB removes anomalous information at their discretion and also clarifies with companies when the need arises.
- Approximately 60% of facilities that are randomly audited are not conserving when they should be. The reason is usually that the economic analysis has been done incorrectly or not at all.
- The team received a handout on the flaring and venting volumes (m3/d and E3M3/yr) reported from paper batteries and other batteries. (Paper batteries report data from different geographic locations through one data point.)

# Action Item 41.7: Mike will modify the tables in this handout to show actual volumes and provide a description of the battery types.

• The ERCB provided information on well test audits. The team discussed the possibility of revising the 72 hour time limit.

#### Action Item 41.8: Mike will distribute a well test audit data table that includes:

- The number of well tests per year.
- Average time of flaring by well type.

Action Item 41.9: Mike will write a proposal about what was intended by the well test reporting requirement.

# 3) Update on Otherwise Flared Solution Gas Royalty Waiver Program

- Alberta Energy gave a summary on the Gas Royalty Program.
- There is a new royalty program that focuses on deep oil drilling and therefore, flaring will be excluded. The royalty holiday can only be accumulated during production.
- The Otherwise Flared Solution Gas (OFSG) program does not extend to bitumen wells until January 1, 2009.

- A decrease has been observed after 2005 in the OFSG Royalty Waiver Value because more conservation opportunities have been identified.
- The program is an incentive for marginal facilities to conserve.

## 4) Next Steps: Strategic Discussion

Additional Information Needs

- The team brainstormed possible future needs for information and research.
- Extracting information on sour gas dehydrators from the aggregate data (Action Item 40.5).
- Full Cost Study
  - The team discussed doing a life cycle analysis on the full cost of oil and gas projects.
  - This study could replace the 2003 economic analysis entitled "Solution Gas Flaring and Venting in Alberta" (Action Item 40.11).
  - The study should look at: a full cost analysis, including the economic, social, and environmental implications of conserving; Greenhouse Gas offsets; and the possibility of re-evaluating the Net Present Value.
  - It was noted that anything done as a requirement under Directive 60 does not qualify for GHG credits.
  - Ian, Chris, Mike, James, Andrew, and Krista agreed to participate on a sub-group to develop a scope for the report.

Action Item 41.10: The sub-group will develop a scope for a full cost report, a workplan, and a budget, for review at the next team meeting.

Action Item 41.11: Robyn will poll the sub-group for meeting dates after May 20.

Action Item 41.12: Robyn will send the website link to the 2003 report to the team.

- New and emerging technologies.
  - Rudy, Mike, and Randy formed a sub-group to review new and emerging technologies, as well as those that are close to commercial application.
  - The review should include PTAC research studies.

Action Item 41.13: The sub-group will develop a workplan and budget for reviewing new and emerging technologies and bring to the next team meeting for review.

- Routine versus Non-Routine Flaring
  - Currently, there is no distinction between routine and non-routine flaring.
  - The team discussed how to gather and aggregate this information as efficiently as possible there was interest in finding a way to use the existing system.

Action Item 41.14: Krista will review the information that CAPP currently collects and update the team on the ease of separating routine from non-routine flaring.

Action Item 41.15: Robyn will update the workplan as per the team's discussion.

## 5) CASA Update

• Robyn Jacobsen gave a brief overview of the progress of other CASA project teams.

### 6) Other Business and Next Meeting

- Kerra requested volunteers to make a presentation on the FVPT's progress at the Canadian Pollution Prevention Round Table on June 11 & 12, 2008 in Edmonton.
- Next meeting Edmonton.

Action Item 41.16: Robyn will poll for dates for the next meeting.

7) Adjournment – The meeting was adjourned at 3:45 p.m.