

# Final Minutes



## Ambient Monitoring Strategic Planning Team Meeting #29

**Date:** Wednesday, Nov. 21, 2007

**Time:** 9:30 – 3:30 pm

**Place:** CASA Office, Edmonton

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### In attendance:

Name	Organization
Michael Bisaga	Lakeland Industry and Community Assoc.
Kerra Chomlak	CASA
Brian Free	CASA
Bob Myrick	Alberta Environment
Ken Omotani	TransAlta Utilities
Roxanne Pettipas	CAPP/ConocoPhillips Canada (by phone)
Kim Sanderson	CASA
Chris Severson-Baker	Pembina Institute (by phone)
David Spink	Prairie Acid Rain Coalition
Merry Turtiak	Alberta Health and Wellness
James Vaughan	Alberta Energy and Utilities Board
Kevin Warren	Parkland Airshed Management Zone
Brian Wiens	Environment Canada
Mike Zemanek	Alberta Health and Wellness

### Regrets:

Name	Organization
Findlay MacDermid	Residents for Accountability in Power Industry Development (RAPID)
David McCoy	CAPP/ Husky Oil
Bettina Mueller	Alberta Environment
Keith Murray	Alberta Forest Products Association
Mike Pawlicki	Lafarge Canada Inc.
Ian Peace	RAPID

### Action Items:

Task	Who	When
9.2: Brian Free to load team information to the CASA website and provide the working group with access information.	Brian Free	When CASA website is ready.
27.3: Ian Peace to prepare a table of emissions sources and associated parameters that should be monitored.	Ian Peace	By next meeting
28.2: Brian Free to distribute the ChemInfo report on emissions forecasts to the AMSP team.	Brian Free	Nov. 23
28.3: Bob Myrick to forward AENV lawyer's email to Brian for distribution to the team.	Bob, Brian Free	Nov. 23
28.7: Brian Free to email Terms of Reference for Dr. Cape's contract to the team.	Brian Free	Nov. 23

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Task	Who	When
29.1: Draft a recommendation and some context on amending EPEA to make it a legal requirement for AENV to monitor air quality.	David Spink	By next meeting
29.2: Test the funding breakdown with airsheds to confirm that the current numbers are accurate.	Kevin Warren	By next meeting
29.3: Circulate a copy of Kirk Andries presentation to the team.	Brian Free	ASAP
29.4: Revise the table in section 6.4 to include costs related to data management, quality control, administration, and equipment replacement.	Bob Myrick	By next meeting
29.5: Circulate the steps used to calculate costs to the team; Kevin and AENV staff will review the calculation methodology.	Bob Myrick, Kevin Warren	By next meeting
29.6: Draft basic principles that will help airsheds ensure sustainable funding and circulate to Bob M. and then to the team.	Brian Wiens	By next meeting
29.7: Draft a recommendation, including timelines, for a new funding formula to redistribute monitoring costs more equitably.	Kerra Chomlak, Brian Free	By next meeting
29.8: Test the idea of the GOA paying the full cost of expanding the monitoring network.	Bob Myrick	By next meeting
29.9: Prepare the topic summaries for use at the workshop.	Kim Sanderson and Brian Free	By next meeting
29.10: Poll the team for two possible dates for the next meeting: December 13 or December 17, likely in Calgary.	Brian Free	By next meeting
29.11: See if TransAlta has space on either of the possible meeting days; Dec 13, or 17..	Ken Omotani	By next meeting

Bob Myrick convened the meeting at 9:45 am. The team thanked James for providing doughnuts.

## 1 Administration

Bob Myrick chaired the meeting.

### a) Introductions

Those present introduced themselves.

Mike Zemanek reported that we will be representing AB Health & Wellness and Merry Turtiak will be the Alternate.

### b) Approve agenda and meeting purpose.

Bob reviewed the meeting agenda and purpose, which were approved.

### c) Approve minutes from Meeting 28, September 13, 2007

The minutes were approved.

### d) Review Action Items from Meeting 28.

Task	Status
9.2: Brian Free to load team information to the CASA website and provide the working group with access information.	Carry forward.
18.8: Brian Free to compile a short document that cross-references workshop questions to sections of the report where these questions are addressed, or to other documents as appropriate.	An earlier draft incorporates comments from workshop. Is waiting for workshop report to

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Task	Status
	do table of cross references.
26.10: Brian Free to circulate the hybrid model to the OSC for their consideration.	Done. Discussed at the OSC's Nov 14 meeting.
27.3: Ian Peace to prepare a table of emissions sources and associated parameters that should be monitored.	In progress. Carry forward.
28.1: Bob Myrick to prepare data quality objectives for the monitoring sub-programs.	Recommend that implementation team do this. Drop action item.
28.2: Brian Free to distribute the ChemInfo report on emissions forecasts to the AMSP team.	Carry forward.
28.3: Bob Myrick to seek a legal opinion to confirm who is responsible for monitoring and who must pay.	Done. AENV lawyers advised that AENV responsibility under EPEA is to report annually on SOE but AENV is not required to monitor. Bob will send the email from the lawyer to Brian to forward to the team.
28.4 Bob Myrick to prepare an analysis, comparing the cost of the proposed network to that of the existing network.	Done. Will look at under the funding discussion.
28.5: Bob Myrick to prepare a table about industry compliance monitoring.	Done. There is a table of the cost of the different monitoring networks in the Nov 16 draft.
28.6: Team members will provide Bob with feedback on this section on monitoring costs by September 21.	Done.
28.7: Bob Myrick and Brian Free to post the Terms of Reference for Dr. Cape's contract on the team's CASA website.	Brian will email the final TOR to the team.
28.8: Roxanne Pettipas, Ian Peace, Brian Free to prepare a more-detailed workshop plan.	Done.
28.9: Roxanne will see if CAPP will cover lunch and venue costs. She will look into the availability of the auditorium at ConocoPhillips.	Carry forward..
28.10: Bob Myrick to produce a breakdown of the industrial emissions.	Done. In the Nov 16 draft.
28.11: Brian Free will ask Kevin Warren to provide a breakdown of funding for the airsheds.	Kevin contacted the airsheds to provide data. Bob used his estimate and included a new pie chart in the report.
28.12: Bob Myrick to prepare a breakdown showing how funding of the proposed system will be apportioned among the funders.	Done. To be discussed under Item 5.

With regard to action 28.3, Bob presented the response from AENV lawyers and the team discussed it. In essence, government needs monitoring information to do its state of the environment reporting, and has flexibility as to how the data are collected; i.e., the government can collect the data or require others to collect it. The team identified a gap in that, there is no published standard or requirement as to what quality the data must be or how much is needed to meet the requirements for SOE reporting. The team felt that a more specific requirement is needed to require monitoring to be undertaken. This is because (1) the team has already agreed (as noted in the draft strategic plan) that one objective of ambient monitoring is to support long-term trend analysis and SOE reporting; and (2) because a stronger requirement for monitoring

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would increase the likelihood of long-term funding for the monitoring, which is an important factor in maintaining consistent data.

The team agreed that one possible way to make the monitoring requirement stronger would be to recommend that the Environmental Protection & Enhancement Act (EPEA) be amended to include a legal requirement for AENV to monitor air quality directly or ensure that the appropriate data are collected.

**Action 29.1: David Spink will draft a recommendation and some context on amending EPEA to make it a legal requirement for AENV to monitor air quality. He will run it by Bob then send to the rest of the team.**

In discussing action 28.11, Kevin was asked to test the funding breakdown with the airsheds. (See Figure 3 pie chart in section 6.4)

**Action 29.2: Kevin Warren will test the funding breakdown with airsheds to confirm that the current numbers are accurate.**

## 2 Review Key Project Milestones

Brian Free reviewed the terms of reference, particularly the objectives and key tasks for the team. He also reviewed the status of the work to date, noting that major input is still to come from Dr. Cape's work and the stakeholder workshop. The report will be finalized after the January 15 workshop and presented to the CASA board in March.

The Chairman asked each member to provide their views on the status of work to date. Generally, the team is on track, but a lot of work remains to be done. All members need to ensure their stakeholders are on board. The timelines are ambitious, but doable, and everyone would like to wrap up the team's work in early 2008.

## 3 Status of Contract with Dr. Cape

Dr. Neil Cape is looking at the 11 monitoring objectives as well as other related information. He has not been given the draft strategic plan to better ensure a more objective assessment. Notes from the November 15 teleconference were circulated prior to the meeting and Bob Myrick provided a general update on Dr. Cape's initial assessments.

Dr. Cape feels the ecological subprogram is weak on ammonia and nitrate monitoring, as European research suggests these substances are a concern near CFOs. He will likely recommend that we add this to our program. All members were encouraged to read the notes from the teleconference and provide any comments to Bob.

The team expects to receive Dr. Cape's report by mid-December, and Bob does not think his recommendations will differ radically from the direction the team is taking. Members discussed the best way to share his assessment with workshop participants.

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- One option is to incorporate Dr. Cape's recommendations into the material that goes out to workshop participants so they can see everything.
- Another option is to incorporate, at a minimum, the network components into the team's plan, then leave other aspects to be addressed as part of the implementation. The team prefers to present as much of Dr. Cape's work as possible, and if workshop participants have concerns, they can work with their sector's representative on the team to address them.

After Dr. Cape's report is received, a small group will work to incorporate his input in December. A decision on an approach will be made after his assessment is reviewed.

### 4 Air Quality and Ecological Effects Monitoring

Kirk Andries, executive director of the Alberta Biodiversity Monitoring Institute, gave a presentation on the ABMI and its work. The ABMI is an incorporated member-based organization with a relatively small board of directors in specific categories. The normal operating practice is to seek consensus, but the bylaws do provide for voting, in part to ensure timely decision making.

The following comments were noted by Mr. Andries and members of the team during the discussion of his presentation:

- The ABMI collects samples of biota but does not assess samples with respect to their health. This could be done, but it's a question of resources.
- It would be possible to place ambient monitors at the biodiversity sites. This would provide an opportunity to link air monitoring and the biodiversity network to better assess potential impacts of air quality on ecosystem health.
- The ABMI looked at a range of site densities before deciding on a grid. They concluded that 20 km distance was the right balance in terms of cost and information output. To go from 20 km to 10 km would see a massive increase in costs for not much added value.
- Re funding, the strategy of choice by the board of directors and the Government of Alberta (GOA) has been to endow. With a well-managed and sufficient amount of cash, the program could be supported in perpetuity. They received \$4.2-million this year from the GOA and another \$1-million from industry (energy and forestry). The real operating cost is about \$12-million annually. With \$5.5-million this year, they were able to do about 100 points on the grid, and that was a stretch. When the Institute was set up, the thinking was that the GOA, energy and forestry would contribute equally, but economics have changed and forestry is much more vulnerable now. Mining and oilsands sectors have some regulatory obligations to monitor biodiversity, which is not the case for conventional energy. The GOA has committed to paying on behalf of agriculture.

The team commended Mr. Andries on the ABMI program with its good, publicly accessible database. Public support for the work has also been strong. There are some similarities between how the ABMI approached the development of its monitoring network and what the AMSP team has done to date, and there may be future opportunities for collaboration.

**Action 29.3: Brian Free will circulate a copy of Kirk Andries' presentation to the team.**

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## 5 Funding the Monitoring Network

Bob Myrick prepared new text on funding, which appears in the Nov. 16 version of the report. He provided background to the team on how he calculated the costs and who is paying now for the monitoring network. He noted that the current costs need to be adjusted further to include costs related to administration, data management, equipment replacement, and quality control.

**Action 29.4: Bob will revise the table in section 6.4 to include costs related to data management, quality control, administration, and equipment replacement.**

**Action 29.5: Bob will circulate the steps he used to calculate costs to the team; Kevin and AENV staff will review the calculation methodology.**

Bob also described how he developed the section on funding (6.5), with reference to Criteria Air Contaminant (CAC) emissions and their distribution in Alberta, and explained the example calculations. One option is to use the five CACs (PM<sub>2.5</sub>, SO<sub>x</sub>, NO<sub>x</sub>, VOCs and CO) as the basis for the funding formula; these were chosen since, except for VOCs, these are the parameters measured for the Alberta Air Quality Index. He also used a formula based only on SO<sub>x</sub> and NO<sub>x</sub> emissions. Another approach could be to use the three parameters in the federal Air Quality Health Index (ozone, NO<sub>x</sub> and PM<sub>2.5</sub>).

The team discussed the funding section, noting the following comments:

- At the levels seen in ambient air, carbon monoxide is not very significant.
- The current proposal is that the GOA would be responsible for funding monitoring not funded by the large emitters, and it would be up to the GOA to come up with the cash; they could ask the federal government and municipalities to contribute. Large emitters have been very explicitly identified for their contribution, and the team should be equally clear about what the GOA is expected to contribute. We don't want this plan to die because of a lack of GOA commitment or funding, and a subsequent expectation that industry will pay for any shortfall.
- There are basically three issues: a) What will the new network look like and how much will it cost? b) How will costs be allocated in terms of the general funding formula? c) Where do we get the money? The team has agreed to base funding on emissions, but then there is the issue of which substances to use. It could be very specific; e.g., in an area like Calgary, there is not much big industry so the biggest share would be GOA. The reverse would be true in Fort McMurray. But we are looking at the province as a whole, so we need to choose the parameters and determine the cost on that basis. But if we say the formula is based on SO<sub>x</sub> and NO<sub>x</sub>, and there are no sources of those emissions in an area, what happens?
- The issue is really how to move the money around. This should be kept separate from the issue of allocating costs.
- We need to ensure there are incentives for industry to reduce their emissions. This has been an issue for airsheds, along with the challenge of getting non-point sources to contribute funds. These sources are essentially getting a free ride. The team needs to address these items to help the airsheds, especially the new ones starting up.

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- Airsheds would like the AMSP to provide guidance on a funding formula. But getting funds from diffuse emitters is still a challenge. Other provinces have used things like a gas tax for these sources, but any approach has to be implementable given the social and political context of Alberta.
- There is merit in having the GOA collect funds based on a polluter-pay formula. Some of this would go into the airsheds where there are many non-point sources, and these funds would also be used for monitoring in areas where there are no airsheds. But then how much does the GOA ask the big emitters to contribute?
- The federal government would be expected to cover transboundary stations and municipalities would contribute in cities.
- Another option is to use a blend of approaches. The team could recommend first that the GOA cover the costs of expanding the network and the GOA figures out where the funds come from. Then over time, a funding formula based on four CACs and VOCs is developed and applied to redistribute the costs in a more equitable fashion (e.g., 50-50).

One issue currently facing airsheds, is a lack of sustainable funding. Another issue is equality in cost-sharing: there is good support from point-source polluters, but there is no support from open-source polluters (e.g. Who pays for vehicle emissions?).

After looking at the current distribution of costs, it became clear that that the responsibility for monitoring falls heavily on some industries.

The team agreed that the future funding formula should:

- be fair and equitable in the distribution of costs amongst stakeholders;
- address who is responsible for paying for pollution from open sources, such as vehicle emissions;
- be long-lasting in that it provides certainty into the future;
- be agreed to by consensus of all interested stakeholders; and
- have a clear starting date.

The team agreed that one way to increase equity in supporting monitoring in Alberta, would be for the Alberta government to pay the full *initial* costs of expanding the network, with the understanding that a future funding formula will be developed by consensus.

**Action 29.6: Brian Wiens will draft basic principles that will help airsheds ensure sustainable funding and circulate to Bob and then to the team.**

**Action 29.7: Kerra and Brian Free will draft a recommendation, including timelines, for a new funding formula to redistribute monitoring costs more equitably.**

**Action 29.8: Bob Myrick will test, within AENV, the idea of the GOA paying the full initial cost of expanding the monitoring network.**

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### 6 January 2008 Workshop

Brian Free, Roxanne Pettipas and Ian Peace developed a draft plan for the January workshop, which Brian reviewed for the team. The team agreed with the draft agenda and the proposed topics for discussion and supported the idea of having a worksheet for participants to complete as the workshop proceeds. That will let people see the overall structure and could help to move things along more efficiently. Four breakout sessions are proposed. The thinking is that participants will remain at their tables in a large room and discuss the topic, possibly with a facilitator at each table. Then, the discussion would be opened to the entire group. A strong facilitator will be needed.

The team also agreed to prepare a short (ideally one page) summary for each of the six sections to be presented in detail. Most of this could be extracted from the current draft document, although there is not yet a section on timing and implementation.

**Action 29.9: Kim Sanderson and Brian Free will prepare the topic summaries for use at the workshop.**

It was noted that at the June 2006 workshop, some participants said they wanted to see “dots on the map”. The team acknowledged that some sites can be indicated, but for most, exact locations will not have been determined.

### 7 Governance of the System

The team briefly discussed the proposal for governance of the new system. The current recommendation is that the Multi-stakeholder Implementation Committee (MIC) be lead by AENV. Another option is that it be a CASA committee. AENV is discussing this matter and considering what the implications would be for the MIC and the CASA Data Warehouse. It is likely that the preference will be for the committee to be lead by AENV, as it would give them a stronger mandate and accountability, especially if they agree to fund the system expansion. Some strategic components could go to CASA, but the current proposal has the MIC reporting to AENV, not the CASA board. It was reported from the Operations Steering Committee’s recent discussion of this topic that some stakeholders have some concerns about this AENV-led approach and may prefer the CASA process..

### 8 CASA Update

Brian Free provided an update on CASA activities:

- Board meets December 6 in Edmonton.
- Interviews are underway for a new project manager.
- Clean Air Strategy team is looking at future priorities based on emissions projections. The eventual result from this team will be a new clean air strategy for Alberta.
- Confined Feeding Operations team is starting to assemble its final report and is considering an ammonia objective and an odour management framework.
- Vehicle Emissions Team has not yet settled on its recommendations, but is considering one on mobile remote sensing of vehicle exhaust.



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- Indoor Air Quality team may come forward with a topic for the next CASA science symposium. The AMSP team is asked to consider whether we wish to propose a topic.
- PM and Ozone assessments to 2006 are done; three areas are doing management plans and AENV is working with the relevant airsheds.
- Flaring and Venting team is renewing its terms of reference in preparation for reviewing the success of the framework and EUB Directive 60 in reducing flaring and venting.
- Electricity Five-year review is underway, and team has formed two subgroups: Health and Environment, and a Technical Subgroup. The technical group will redo the emissions forecast and determine a BATEA limit for different technologies.
- Human and Animal Health Team continues to work to address non-consensus issues.
- Performance Measures Committee is assembling measures for 2007.
- The Performance Evaluation Committee is interviewing senior level stakeholders asking about the effectiveness of CASA in supporting the GOA in strategic air quality planning.

## 9 Next Meeting

**Action 29.10: Brian Free will poll the team for two possible dates for the next meeting: December 13 or December 17, likely in Calgary.**

**Action 29.11: Ken Omotani will see if TransAlta has space on either of the two possible meeting days.**

The meeting adjourned at 3:30 pm.