

Final Minutes

Ambient Monitoring Strategic Planning Team Meeting #21



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Date: Tuesday February 13, 2007

Time: 9:30 – 3:30

Place: CASA Offices

In attendance:

Name	Organization
Rob Bioletti	Alberta Environment
Matthew Dance	CASA
Brian Free	CASA
Bob Myrick	Alberta Environment
Crystal Parrell	Alberta Environment
Roxanne Pettipas	ConocoPhillips Canada / Canadian Assoc. of Petroleum Producers
Kim Sanderson	CASA
Chris Severson-Baker	Pembina Institute
David Spink	Prairie Acid Rain Coalition
James Vaughan	Alberta Energy and Utilities Board
B.J. Vickery	Lafarge Canada Inc / Alberta Chamber of Resources
Kevin Warren	PAMZ, PASZA
Brian Wiens	Environment Canada

Regrets:

Name	Organization
Karina Bodo	Alberta Health
Findlay MacDermid	Residents for Accountability in Power Industry Development
David McCoy	Husky Oil / Canadian Association of Petroleum Producers
Ian Peace	RAPID
George Pfaff	Petro-Canada Edmonton Refinery / Cdn Petroleum Products Institute
Ken Omotani	TransAlta Utilities
Mike Pawlicki	Lafarge Canada Inc.
Mike Queenan	RAPID
Brad Watson	Lafarge North America

Action Items:

Task	Who	When
9.2: Load the data to the CASA data warehouse and provide the working group with access information.	Matthew Dance	ASAP
14.1: Forward the parameters that are included in the SO ₂ and NO _x forecasts to Matthew and the team.	Matthew Dance	Ongoing
18.8: 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.	Matthew Dance	ASAP
19.2: Invite the DC9 to join the team	Matthew Dance	ASAP

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Task	Who	When
20.6: The Implementation and Funding group will write out the assumptions and rationale for each of the proposals or recommendations.	Bob Myrick	April
21.1: Bob Myrick will continue to investigate the regulatory requirements of the proposed system.	Bob Myrick	April
21.2: Bob Myrick's draft on current air monitoring costs will be distributed to Project Team members	Brian Free	ASAP
21.3: All sub-groups are to submit their reports to Matthew Dance. He will forward them to Kim Sanderson, so she can incorporate them into the Project Team's main report.	Matthew Dance	ASAP
21.4: David Spink and Bettina Mueller will contact consultant Neil Cape and determine how much work is needed to complete the top-down component of the strategic plan, and how much his services would cost.	David Spink and Bettina Mueller	For March 12 meeting
21.5: Brian Wiens and Bettina Mueller will contact the US EPA to learn more about the work they are doing on air monitoring network design.	Brian Wiens and Bettina Mueller	For March 12 meeting
21.6: Roxanne Pettipas will create a summary of the highlights of the Jurisdictional Review.	Roxanne Pettipas	April
21.7: Bob Myrick will provide the Operations Steering Committee with an update on our strategic plan and will report back any suggestions they may offer. Brian Free will make arrangements for the OSC meeting.	Bob Myrick, Brian Free	For next OSC meeting

Bob Myrick convened the meeting at 9:45 am.

1. Administration

a. Introductions

Introductions were made around the table. New at the table were David Spink with the Prairie Acid Rain Coalition, and Brian Free, newly seconded from Alberta Environment to CASA.

b. Approve agenda and meeting purpose

The agenda and meeting purpose were reviewed. Bob Myrick added an upcoming presentation to the Operations Steering Committee as another item under Other Business. The agenda was approved with that change.

c. Approve minutes

- The November 2 Minutes were approved as distributed.

d. Review action items

9.2: Matthew to load the data to the CASA data warehouse and provide the working group with access information. **Carry forward.** The new website is up and running, but we're still working on correcting some broken links. The website should be fully operational by April.

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14.1: Matthew to forward the parameters that are included in the SO₂ and NO_x forecasts to the team. **Ongoing function.**

18.8: Matthew 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. **Carry forward.**

19.2: Matthew to invite the DC9 (Directors' Committee for the Alberta's Health Regions) to join the team. **Carry forward.** Matthew has emailed a member of that committee and is awaiting a response.

20.1: Roxanne will confirm with Ian Peace that the team agreed not to have an ENGO co-chair. **Done.** At this point, the ENGO caucus does not feel the need to nominate a co-chair.

20.2: Bettina will talk to Bob Myrick to determine who he has talked to about addressing the regulatory requirements of a new system. **Done.** Bob reported that some conversations about the regulatory aspects have taken place. One challenge is to integrate industry monitoring into the provincial system.

Action Item 21.1: Bob Myrick will continue to investigate the regulatory requirements of the proposed system.

20.3: BJ will meet with Bob to complete their work on system management. **Done.** B.J. Vickery has produced a document and distributed it to some team members. Matthew will follow up and forward to Kim for inclusion in the next draft of the report.

20.4: Bettina will talk to Brian Wiens to see if Environment Canada is familiar with the EPA work and, if so, whether EC could do a presentation at the next meeting. **Carry forward.** Brian Wiens will follow up with Bettina.

20.5: Rob will discuss with Bob the task of developing a spreadsheet that shows the current monitoring costs and who is paying, and what the anticipated costs amount to. **Done.** Bob distributed a draft document he had prepared, entitled "Current Air Monitoring Costs in Alberta".

Highlights

- Total capital replacement cost for the current continuous monitoring network is about \$25.7 million.
- Total annual operating costs for continuous monitoring is about \$5.6 million.
- Funding for current air monitoring is shared as follows: 56% by industry, 32% by Airsheds, 11% by AENV and 1% by Environment Canada.

Action Item 21.2: Bob Myrick's draft on current air monitoring costs will be distributed to Project Team members.

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20.6: The Implementation and Funding group will write out the assumptions and rationale for each of the proposals or recommendations. **Carry forward.** Bob Myrick circulated a draft discussion document, entitled “Rationale for Suggested Monitoring Network Design”. He explained that it offered rationale for population-based monitoring and monitoring related to emissions sources, but a strong scientific rationale for the network design is lacking.

20.7: Bettina will email the three subgroup champions, noting the timelines and expectations for the champions. **Done.** The status of the three subgroups’ work was discussed:

Systems Management Sub-group – BJ Vickery provided an update for this subgroup, noting there have been a couple of conference calls and Bob gave a status report at the last Project Team meeting on the group’s thinking about the current system. The group has not met since the September 19 team meeting. BJ received some feedback on his draft, which he revised and sent a final draft to Bob and Matthew last November. Need to confirm that the Team’s report writer, Kim Sanderson, has received this section.

Implementation and Funding Sub-group - Kevin Warren noted that Bob was covering the implementation side of things. One gap with respect to funding is an estimate of the cost of the proposed new network. Kevin has sent an outline of roles and responsibilities to Ken Omotani for comment. Ken will be drafting the proposed recommendations for this section.

Data and Information Management Sub-group - Brian Wiens reported that this section needs further work, especially in relation to quality assurance / quality control. Coordination may be sought at the national level to address QA/QC.

Action item 21.3: All sub-groups are to submit their reports to Matthew Dance. He will forward them to Kim Sanderson, so she can incorporate them into the Project Team’s main report.

20.8: Bettina will email the team with the date and time for the teleconference. **Done.** Teleconference call was held on November 27.

20.9: Matthew will follow up on communications within the health sector. **Done.** See task 19.2, above.

2. Where are we – the big picture?

Matthew Dance reviewed the work of this team, using a PowerPoint presentation. His objective was to confirm the team’s purpose and reinvigorate the team.

Matthew reviewed the past meeting Minutes and highlighted a number of accomplishments. The team first met in March, 2004. During that first year, the team clarified its terms of reference and membership, reviewed the 1995 and 1997 reports and discussed monitoring requirements. In 2005, the team did a Jurisdictional Review to identify best practices and justify why and where we monitor. Also during 2005, the team considered a “straw dog” prepared by AENV.

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The Jurisdictional Review included Ontario, GVRD, United Kingdom, Australia, New Zealand, Colorado, Michigan, California, Sweden, Germany and Alberta. It investigated parameters, density of stations, rationale, noteworthy innovations, funding and other topics. Matthew noted that this is a good piece of work that warrants greater use.

Matthew briefly reviewed AENV's straw dog that focused on a backbone network for baseline monitoring. One challenge is to integrate various scales of monitoring, such as the NAPS, provincial monitoring, regional airshed monitoring and local industrial sites. The current system needs updating because of population growth, industrial expansion and the growing number and sophistication of airshed organizations.

In 2006, the team produced a draft strategic plan for ambient monitoring and held a June workshop. Matthew presented a decision-making tool in the form of a two-tiered decision tree. He discussed how the approach was not prescriptive, but responsive to changing needs and that integration of the different scales of monitoring needed to be integrated.

Matthew concluded that the team has done a lot of good work, but tended to get caught up in the finer details. He estimates the report is 90% complete. The team needs to step back and focus more on the bigger picture.

Discussion

- Not certain that the report is that close to completion. The costs of the proposed system and scientific rationale need to be added. We need to see the sub-group reports incorporated into the main report in order to decide what else is needed.
- David Spink explained that he is working with the Wood Buffalo Environmental Association (WBEA) to develop an air monitoring network. He advised the team to resist the temptation to get into the details of the system and think more broadly at the provincial scale. He emphasized the importance of a long-term view – 50 to 100 years. He suggested that biological indicators of air quality, such as lichens, could be employed and noted that the Alberta Biodiversity Monitoring Program will establish a provincial grid of monitoring sites.
- Several agreed that the team has spent too much time considering the details of the network. The strategic plan does not have to put “dots on the map”, but it must be grounded in reality with a good potential for implementation.
- Further discussion of funding sources is needed.
- Need to set a clear goal with timelines. More frequent meetings will help to get the team's work completed.
- Need to test the new system against the needs of the current and future management frameworks.
- Should consider a provincial grid at a large scale with one station in each cell. Other factors, such as population centres and emissions sources, will necessitate additional sites within a cell to meet other important objectives.

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Loss of a key Team leader

Sadly, Kevin Warren reported on the recent passing of Project Team member Myra Moore, of the Fort Air Partnership. She had been recently diagnosed with inoperable brain cancer. The funeral will be held on Friday, February 16 in Sherwood Park. Donations in her memory can be made to the David Suzuki Foundation and the S.P.C.A.

Melanie Watson is currently serving as Acting Executive Director for FAP.

3. Gaps, and 4. More about Gaps

Discussion about remaining gaps focused on three main areas:

1) The Strategic Top-Down View

Members acknowledged that the team has dwelt on the details of the network, looking at the ground-level. There was general agreement that more consideration of the “big picture” is needed to fulfill the strategic component of the Team’s task.

2) Integration

There is a need to integrate the top-down and bottom-up approaches to the monitoring network. Integration among different scales of current monitoring networks is also important. For example, the NAPS, provincial, regional airshed and local industrial monitoring should all fit logically within the overall system.

3) Clear Objectives

The team referred to the seven monitoring objectives given in the discussion draft, “Rationale for Suggested Monitoring Network Design”:

Monitoring Objective #1: Collect/provide data and information that can be used to assess the impact of outdoor air quality on human health.

Monitoring Objective #2: Collect/provide data and information that can be used to assess the impact of air quality on ecosystem health.

Monitoring Objective #3: Collect/provide data and information that can be used to characterize air quality entering or leaving the province (boundary transport).

Monitoring Objective #4: Collect/provide data and information that can be used to characterize background air quality in Alberta.

Monitoring Objective #5: Collect/provide data and information that can be used to ensure compliance with ambient air quality objectives caused by pollutant emissions from industry.

Monitoring Objective #6: Collect/provide data and information that can be used to represent special gaps in air quality monitoring for Alberta.

Monitoring Objective #7: Collect/provide data and information that can be used for data assessments associated with CASA Frameworks and state of the environment reporting to the public.

Where they all say “Collect/provide data and information...”, it was suggested that *providing data* was a reporting function and these objectives should focus strictly on the collection of data. It was agreed to remove the word “/provide” from the seven objectives.

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It was observed that the seven objectives each provided a specific application of the data, but there was an even higher-level objective for the monitoring network:

To characterize air quality in Alberta.

The collected information can be used for, but is not limited to, describing trends and assessing impacts on human health and ecosystems. It has the 100-year view.

The seven monitoring objectives fit below that overall objective.

Regarding Objective # 5, some concern was expressed that the provincial monitoring network will be expected to provide data for compliance assessment. Although it may contribute some relevant data, this objective may create unreasonable expectations.

An additional “sub-objective” was suggested: *To understand sources of anthropogenic and biogenic emissions and their impact on air quality relative to ambient objectives.*

Go-Forward Strategy

Matthew suggested the following next steps.

- 1) Complete the report as it is currently outlined. This requires incorporation of the three sub-groups’ material.
- 2) Use the primary objective to focus discussion on the high-level, top-down approach.
- 3) Adjust the report to incorporate the top-down approach. Some material in the report may need to be shifted into appendices.

The first two steps will be the main focus of the next Team meeting.

Timeline: In order to spur the Team to complete the report, a target for report completion was set: **the September 2007 CASA Board meeting.**

This requires

- a completed draft report by April/May,
- initial public consultation on the proposed strategic plan in May, and
- report revisions, followed by a final public consultation in June.

The main audiences for the report are the Implementers, namely government, airsheds and industry.

Additional Support

David Spink described the qualifications of Dr. Neil Cape, the consultant who has worked with the Wood Buffalo Environmental Association on their monitoring network. Dr. Cape is based in Edinburgh, Scotland at the **Centre for Ecology and Hydrology**. He is very familiar with air monitoring network design in Europe. It was agreed that David and Bettina will scope out the top-down approach with Dr. Cape.

Action Item 21.4: David Spink and Bettina Mueller will contact consultant Dr. Neil Cape and determine how much work is needed to complete the top-down component of the strategic plan, and how much his services would cost.

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It was also decided that further investigation of work being performed by the US EPA is desirable.

Action Item 21.5: Brian Wiens and Bettina Mueller will contact the US EPA to learn more about the work they are doing on air monitoring network design.

It was agreed that the Jurisdictional Review contains valuable information. A summary should be included as an appendix to the Team's report and may be used to share this information with other audiences. Roxanne offered to write a summary.

Action Item 21.6: Roxanne Pettipas will create a summary of the highlights of the Jurisdictional Review.

5. Other Business

Operations Steering Committee

Bob Myrick reported that the Operations Steering Committee, which works on issues related to data management and the current air quality monitoring network, is patiently waiting for a presentation of the proposed monitoring strategy being developed by this team. They want to get a sense of direction for their own Committee's work.

Since a final strategy proposal is still under construction, an update for them would be appropriate and their reaction to certain options for network management would be helpful.

Action Item 21.7: Bob Myrick will provide the Operations Steering Committee with an update on our strategic plan and will report back any suggestions they may offer. Brian Free will make arrangements for the OSC meeting.

CASA Update

Matthew offered an update on some recent developments at CASA.

The Renewable and Alternative Electricity Project Team has signed off on their report and will make a presentation at the March Board meeting.

Jillian Flett has joined CASA as the Acting Executive Director. She is on secondment from Alberta Environment for one-year while a nation-wide Executive search is undertaken.

Brian Free has joined CASA on a one-year secondment from Alberta Environment as a Project Manager. Brian will provide back-up for this Team, especially while Matthew is on vacation, from February 20 to March 23.

6. Next Meeting

The next team meeting will be on Monday March 12, from 9:30am to 3:30pm. It will be held in Calgary, graciously hosted by ConocoPhillips. A proposed agenda outlined two main areas for discussion:

1. The status of the draft report
2. Further exploration of the high level objective 'To characterize air quality in Alberta'

The meeting adjourned at 2:15pm.