CASA
Clean Air Strategic Alliance

10035 108 ST NW FLR 10
EDMONTON AB T5J 3E1
CANADA

Ph (780) 427-9793
Fax (780) 422-3127
Email casa@casahome.org
Web www.casahome.org

Final Minutes

Ambient Monitoring Strategic Planning Working Group Meeting #13

Date: 16 January 2006
Time: 9:30 – 3:30
Place: CASA – 10th Floor Board Room

In attendance:

Name	**Organization**
Rob Bioletti	Alberta Environment
Matthew Dance	CASA
David Graham	Alberta Environment
Alex MacKenzie	Alberta Health (For the morning)
Myra Moore	Fort Air Partnership
Bob Myrick	Alberta Environment
Michael Queenan	Residents for Accountability in Power Industry Development
Ken Omotani	TransAlta Utilities
Roxanne Pettipas	ConocoPhillips Canada / Canadian Association of Petroleum Producers
Chris Severson-Baker	Pembina Institute
Donna Tingley	CASA (For agenda item 1)
James Vaughan	Alberta Energy and Utilities Board
B.J. Vickery	Lafarge Canada Inc / Alberta Chamber of Resources
Kevin Warren	PAMZ, PASZA, PAS, WCAS.
Brian Weins	Environment Canada

Regrets:

Name	**Organization**
David McCoy	Husky Oil / Canadian Association of Petroleum Producers
Keith Murray	Alberta Forest Products Association
George Pfaff	Petro-Canada Edmonton Refinery / Canadian Petroleum Products Institute
Mike Pawlicki	Lafarge Canada Inc.
Ian Peace	Residents for Accountability in Power Industry Development
Brad Watson	Lafarge North America

Action Items:

Task	Who	When
9.2: Load the data to the web site and provide the working group with access information.	Matthew	ASAP
13.1: Provide a 1º x 1º grid emissions inventory of NOx and SO2 for the decision making tool that is currently under development.	Bob	27 January 2006
13.2: Add Alex and BJ to the site selection sub-group. Note that the sub-group currently has Bob, Brian, Chris and Matt as members.	Matthew	20 January 2006
13.3: Provide wording for the Open Path Monitoring section of the report.	Bob	27 January 2006
13.4: Provide wording for the Remote Sensing section of the report.	Brian	27 January 2006

13.5: Provide wording for the Emergency Response section of the report	David	27 January 2006
13.6: Working with Matthew and the co-chairs will draft a new section 3 and 4.	Heidi	06 February 2006
13.7: Organize a workshop sub-group that will include Ken and Mike.	Matthew	27 January 2006
13.8: Work with David, Roxanne and BJ on the board presentation.	Matthew	Next meeting

The meeting was called to order by David Graham at 9:40.

1. Administration

a. Introductions

Round table introductions were conducted.

b. Approve agenda and meeting purpose.

The agenda and meeting purpose were approved with the addition of 6.a. Workshop.

c. Approve the minutes from the last meeting.

The minutes were approved as tabled.

d. Review action items from last meeting.

Task	Status
9.2: Load the data to the web site and provide the working group with access information.	Carry forward
10.7: Strike a Site Selection Sub-group.	Complete
11.1: Have the new team goal approved in a modified terms of reference by the CASA board.	The CASA board is meeting in March 2006. The new goal statement will be approved then.
11.2: Word smith the AAQMN Vision, Goals and Objective and present to the team at the next meeting.	Complete and on agenda
11.3: Sort the AAQMN objectives by goal statement.	Complete and on agenda
11.4: Discuss developing a formula for determining the placement of continuous monitors.	Complete and on agenda
11.5: Poll for a next meeting date in early January.	Complete

e. CAMS

Donna presented the team with copies of the new CAMS document. The CAMS describes the basic decision-making process of the Clean Air Strategic Alliance (CASA). This iteration of the CAMS reflects the evolution of the process after ten years of experience and replaces earlier descriptions of the Comprehensive Air Quality Management System (CAMS).

2. Monitor Siting Criteria

Matthew provided some background, as follows:

- At a previous meeting, the team discussed the notion of defining a rationale or process to determine how and where AAQ monitors are placed. The 1995 and 1997 reports do now explain why, for instance, Edmonton has 3 AAQ monitors, or why they were sited in their current locations.
- During the Jurisdictional Review, it was noticed that Australia had a formulae that helped determine placement of AAQ monitors based on population increments. The team felt

that a linear formula that considered only one parameter was not good enough for the Alberta network.

- At the last meeting, it was suggested that we should consider several parameters including current and projected population growth and industrial / transportation emissions.
- A small group was set up to consider this problem and suggest a solution.

Current thinking
Goal: To develop a decision tool that will assist with determining the placement of AAQ monitors.

Discussion

- The first level of the decision tool should be population - we can define some population thresholds
- Industrial emissions, both current and projections
- The tool would be applied to all types of monitoring stations.
- Perhaps we need to develop more than one tool
- What is the emission threshold for large emitters?
- There are emission inventories available that could be applied to this tool.
- How could emerging data / issues be applied to this tool of the decision making process.
- The tool could have two branches - one based on population, and the other on industry
- Smaller populations could have temporary rotating monitoring
- Emissions (and a forecast) are available in a 1º x 1º grid – N and SO2
- The decision tree and associated elements are not linear – a formula cannot be developed to indicate where monitors should go. We have to provide some subjective value judgments to this process. The right people need to be involved.
- All elements of the tool should be ranked and compared to themselves
- In addition, we should be careful how this is communicated. We are developing a decision tree that sits within a bigger decision matrix.
- Community concerns, among other things, should also be considered
- Should evaluate the potential for human exposure to outdoor air pollutants. As such, more intensive monitoring where there are more people and more emissions
- This tool is a first step of a process – the last 'box' of this tree can be 'other considerations'
- A small group is needed to put this together

The team conducted a round table to brain storm potential elements that should be considered for a decision matrix, as follows:

Population	Emissions	Type of Emissions
Pollution	Demographic	Emission Intensity
Address local concerns	Number of Emitters	Perceived Health Concerns
Modelling Indicators	Health Complaints from Community	Long range transport
Real Health Anomalies	Is this a location previously defined by a management framework	Baseline
Evidence based health complaints as defined by the	Long term population and emission forecasts	Weather, local climate

Ministry		
Animal health	Biological and physical, topography	Down wind of large urban centers
Emission rates and dispersion	Transportation and infrastructure	Quality of emissions
Remote sensing, satellite imagery	Ecosystem health	Potential for and magnitude of upset condition or catastrophic event
Sensitive receptor	Weighing – prioritizing	CASA initiatives / frameworks
Background	Monitoring and response to PMO3	

ACTION 13.1: Bob will provide a 1º x 1º grid emissions inventory of N and SO2 for the decision making tool that is currently under development.

ACTION 13.2: Matthew will add Alex and BJ to the site selection sub-group. Note that the sub-group currently has Bob, Brian, Chris and Matt as members.

3. Review Section 3: Goals and Objectives

The team reviewed the goals and objectives for the AAQ monitoring network.

Goal 1 – Gather data

Characterize Alberta's ambient air quality both temporally and spatially in the most efficient and economically sustainable way.

Discussion

- The goal should be to integrate levels of monitoring.
- We are gathering data, not characterizing the ambient air in Alberta.
- The vision is good – it does not exclude anyone

Revised Goal 1 – Gather Data

The team agreed to revise Goal 1 to read:
Collect data for Alberta's ambient air quality both temporally and spatially in the most efficient and economically sustainable way.

Decision:
Goal 2 – Dissemination of data and information will be discussed at the next meeting.

4. Review Section 4: Proposed Provincial Integrated Air Quality Monitoring Network

The team identified and discussed a number of issues.

Discussion

4.0 Proposed Provincial Integrated Air Quality Monitoring Network

- Integration – the title indicates that integration is an issue, yet it is not mentioned once in the section

- There are a lot of components currently in place. The Introduction to section 4 should describe those components and define how they are going to be integrated.
- Roles and responsibilities as well as a periodic review of the plan should be discussed in the implementation section

4.1 Ambient Air Quality Monitoring Techniques

- Monitoring technologies should be fully explained – describe the technologies, methods and optimal ways of monitoring.
- A glossary should be included as an appendix
- New and developing technology should be described generally, with two specific references – open path and remote sensing.
- The network will only use equipment approved in the Ambient Monitoring Directive
- Emergency Response should be defined and included in the 5 year review – these technologies may be used in the future but they do not supplement other monitoring technologies.

4.2 – 4.3 the Human Health Component and Ecological Effects Component

- These sections should be changed to document how Human Exposure and Ecological Effects are applications of the data, and the document should be structured:
    - 4.2 Applications
    - 4.2.1 Human Exposure
    - 4.2.2 Ecological Effects
- Dry and wet deposition should be included under the ecological effects section.

4.4 Transboundary Transport and Flux, and Visibility

- Describe the issues pertaining to Alberta and transboundary flux.
- How are we addressing these concerns with our network

ACTION 13.3: Bob will provide wording for the Open Path Monitoring section of the report.

ACTION 13.4: Brian to provide wording for the Remote Sensing section of the report.

ACTION 13.5: David will provide wording for the Emergency Response section of the report

ACTION 13.6: Heidi, working with Matthew and the co-chairs will draft a new section 4.

5. Other Business

a. AMSP Workshop

It is time for the team to start thinking about organizing a workshop for the spring. As such, a sub-group should be formed to take care of this.

ACTION 13.7: Matthew will organize a workshop sub-group that will include Ken and Mike.

b. Board Update

The AMSP Team has recently changed their goal as defined in the Terms of Reference. As such, they have decided to present this change, in the context of a project update, to the CASA Board in March. David, Roxanne and BJ have volunteered to make this presentation

ACTION 13.8: Matthew will work with David, Roxanne and BJ on the board presentation.

6. Next meeting

Date: Friday February 10th, 2006
Time: 9:30 – 3:30
Place: EUB office in Calgary (2nd Floor Video Conference room)
640 - 5th Avenue, S.W.
Calgary

7. Adjournment