## **Ambient Monitoring Strategic Planning Team** Meeting #14

**Date:** Friday February 10<sup>th</sup>

**Time:** 9:30 – 3:30

**Place:** Energy and Utilities Board – Second Floor 640 – 5<sup>th</sup> Avenue S.W. Calgary

## In attendance:

**Organization** Name Alberta Environment Rob Bioletti

**CASA** Matthew Dance

Alberta Environment David Graham

David McCov Husky Oil / Canadian Association of Petroleum Producers

Myra Moore Fort Air Partnership Bob Myrick Alberta Environment

Michael Queenan Residents for Accountability in Power Industry Development

Ken Omotani TransAlta Utilities

ConocoPhillips Canada / Canadian Association of Petroleum Roxanne Pettipas

**Producers** 

Chris Severson-Baker Pembina Institute

James Vaughan Alberta Energy and Utilities Board

Lafarge Canada Inc / Alberta Chamber of Resources B.J. Vickery

**Regrets:** 

Name **Organization** 

Alberta Health (For the morning) Alex MacKenzie

Keith Murray Alberta Forest Products Association

George Pfaff Petro-Canada Edmonton Refinery / Canadian Petroleum Products

Institute

Mike Pawlicki Lafarge Canada Inc.

Residents for Accountability in Power Industry Development Ian Peace

**Brad Watson** Lafarge North America

Kevin Warren PAMZ, PASZA, PAS, WCAS.

**Environment Canada Brian Weins** 

#### **Action Items:**

Task	Who	When
9.2: Load the data to the web site and provide the working	Matthew	ASAP
group with access information.		
14.1: Forward the parameters that are included in the SO2	Bob	28 February
and NOx forecasts to Matthew and the team.		
14.2: Work with Heidi to incorporate the section 5	Matthew	28 February
directional thinking into the next draft of the report.		
14.3: Work with Heidi to incorporate the section 3-4	Matthew	28 February
comments and directional thinking in the next draft of the		
report.		

14.4: Incorporate the feedback provided for the decision	Rob	28 February
tool into a next draft.		·
14.5: Draft a straw dog multi-stakeholder process for the	Matthew	28 February
selection of ambient air quality monitoring sites.		·
14.6: Develop guidance criteria for the use of the decision	Site Selection Sub-group	28 February
tool.		·
14.6: Develop materials for this June workshop.	Workshop Sub-group	28 February
14.7: Poll for March and April meeting dates	Matthew	ASAP

#### 1. Administration

#### a. Introductions

Introductions were made around the table

## b. Approve agenda and meeting purpose

Approved as tabled

# c. Approve minutes

The minutes from the January 2006 meeting were approved with the following clarification:

• In ACTION 13.1: N was changed to NOx.

#### d. Review action items

Task	Status
9.2: Load the data to the web site and provide the working group with access	Ongoing
information.	
13.1: Provide a 1° x 1° grid emissions inventory of NOx and SO2 for the	Complete
decision making tool that is currently under development.	
13.2: Add Alex and BJ to the site selection sub-group. Note that the sub-	Complete
group currently has Bob, Brian, Chris and Matt as members.	
13.3: Provide wording for the Open Path Monitoring section of the report.	Complete
13.4: Provide wording for the Remote Sensing section of the report.	Complete
13.5: Provide wording for the Emergency Response section of the report	Complete
13.6: Working with Matthew and the co-chairs will draft a new section 3 and	Complete
4.	
13.7: Organize a workshop sub-group that will include Ken and Mike.	Complete
13.8: Work with David, Roxanne and BJ on the board presentation.	Complete

## **Discussion**

The following discussion occurred during the review of action items:

ACTION 13.1: Provide a 1° x 1° grid emissions inventory of NOx and SO2 for the decision making tool that is currently under development.

- The levels of SO2 are currently declining in Alberta. The Suncor de-sulphurization stack is partly responsible for this. But, it is anticipated that SO2 levels will increase in the future.
- What parameters are included in the SO2 and NOx forecasts?
- How will we use this forecast information?
- The emissions forecasts (as well as population, transportation etc...) can be integrated with the decision trees. The forecasts will indicate where emissions are most likely to increase and we can therefore plan more effectively.
- We mat need a more refined emissions view to help place monitors in specific locations.

# ACTION 14.1: Bob will forward the parameters that are included in the SO2 and NOx forecasts to Matthew and the team.

## 2. Section 5 – Data Management System

Bob provided a summary overview of the 1995 AAQMN Data Management System

#### **Data and Information**

The original principles for the system were:

- Reliable and flexible information access, retrieval, archiving, and utilization, based on credible data management procedures;
- Data security;
- Responsible data ownership and coordination between owners;
- Horizontal flow of information to all stakeholders; and
- Ability to transfer information vertically between various scales of monitoring.

## Database will:

- Contain continuous, lab and bioreceptor data
- Ensure correlation capability with other monitoring programs (human health, ecosystem health, airsheds)
- QA/QC
- Automated summaries
- Data Interpretation and Synthesis are required for various user groups.
- Need links on CASA Data Warehouse to other monitoring programs or do we need to have these summary documents on the site.
- Air quality information must be provided in a way that is accessible to the public.

The new system should add more value for the public, such as:

- Weekly publication of the AQI in the newspaper by FAP.
- Educational tool as FAP's project with Elk Island School Board.
- Need more media attention.
- Need to get information to people.
- The plan did not develop the concept of pushing information to stakeholders.
- Link to human, ecological and animal health information.
- Link to emissions information (NPRI, AENV, GHG)?
- Needs to evolve from a data management system to an information system.
- Need dedicated, consistent data to be submitted by providers!!
- The data warehouse needs to contain air quality data from all monitoring networks, not just the backbone.
- The website should have links to mobile and bio-receptor data and reports so they are available to the public but not on the website.
- Summary info will also be available at the AENV SOE web page.
- We need something for general public. Needs to be more user friendly.
- PDF file/excel file? Monthly standard reports?
- There should be public notification of air quality events.
- More CASA press releases use of the press.

#### **Discussion**

The following discussion reflects comments made regarding the presentation on a summary overview of the 1995 AAQMN Data Management System:

- The zones are currently the data provider to the CASA Data Warehouse
- Do we want bio-receptor data on the website?

- We should only have AAQM data on the website, but provide a link to other types of data such as health and ecological effects.
- The ambient data provided by airshed zones is verified by the data providers.
- How can industry provide data from special projects or discrete monitoring events?
- Can AENV's mobile monitoring data be provided?
- Some members feel that we should include human exposure and ecological effects data on the CASA data warehouse.
- Others feel that we should stick to air quality data that we should do one thing and do it well.
- Can we shift from providing data to providing information?
- Perhaps we can provide data actively for instance, rather than simply post data on a website, there may be a way to send data to interested users.
- Is it possible to make electronic data submission mandatory for those with an approval?
- Does AHW want their human exposure data on the CASA data warehouse website?
- A real time AQ website is achievable for Alberta. The website could also include archived data.
- Meta data should also be provided. Meta data could include information on where the data came from (site documentation), when it was recorded and who was responsible for the QA/QC.

## Directional Thinking<sup>1</sup>:

Members of the team feel that a needs and use assessment should be conducted for the CASA Data Warehouse.

## **Data Management System (CASA Data Warehouse)**

The team discussed several specific questions related to the data management system:

## **Scope**

At its broadest, the scope of the data management system can include:

- Ambient air quality data
- Special monitoring studies
- Ecological effects monitoring data / studies could be limited to AQ related data / studies
- Emissions inventory data
- Industrial approval data ambient monitoring and emissions
- Mechanisms or tools for consistent data reporting
- Health effects monitoring data
- Reports on AQ data
- A user survey on the website tools to help manage the website
  - o Who uses the website
  - O How do they use the data / information provided on the website
  - o What are the needs of the users
- Education and advocacy tools / messages
- Outreach and communications component
- Archived AQ data

#### **Products can include:**

- AQ notices educational in nature, for instance why there might be health impacts from PM
- AQ Bulletins could encompass messages regarding AQ should come from a regulator or government agency.

<sup>&</sup>lt;sup>1</sup> Directional thinking refers to the direction that this team is going with a specific topic. Directional thinking **does not** imply that the team has reached agreement or consensus.

## Audience

The target audience for the website can include:

- Regulators
- Public
- Schools junior, middle and high schools
- Post secondary
- Academics scientists researchers
- Industry and environmental consultants
- Special interest groups
- Media local and provincial
- Hospitals health care delivery
- Health regions
- Environmentally sensitive populations

Question – What should go onto the website?

# ACTION 14.2: Matthew will work with Heidi to incorporate the section 5 directional thinking into the next draft of the report.

## 3. Comments on section 3-4

The team reviewed sections 3 and 4 from the draft report and provided comments on an electronic version of the document.

# ACTION 14.3: Matthew will work with Heidi to incorporate the section 3-4 comments and directional thinking in the next draft of the report.

## 4. Decision tool update

Rob and Matthew provided an update on the work accomplished so far:

- At the last meeting the team agreed that a tool was required to help decide where to place AAQ monitors.
- It was observed that the 1995 process set out specific goals and timelines without defining a process or rational for the selection of the AQ monitoring sites
- It was also observed that 10 years after the 1995 AAQ Monitoring Network plan was agreed to, it is about 50% implemented.
- The decision tool would exist within a multi-stakeholder framework where the decision tool would be one component of a larger assessment and decision process.
- The process would consider parameters that a decision tool cannot; such as cost and relative priority.
- Outstanding questions at this point include:
  - o What types of monitoring are required for any given location?
  - o And what locations should be initially considered?

#### **Human Health Tool**

- A great start
- More detail is required to understand each of the decision points
- A guidance document should be developed to assist with the use of this tool
- The tool describes 'upgrades' in the monitoring system, but it should also capture the possibility of downgrades.

- As with industry, we should also have population forecasts available to help with the human exposure component of the decision making process.
- Each decision tool should be tested.

## **Ecosystem Tool**

- Remove the population box
- What is an ecosystem need a working definition to help determine when to apply this tool.
- Remove the visibility box
- At this point Roxanne got up to fill her water bottle while Matt continued to scratch his a......
- The tools should all be combined into one longer decision tree we therefore only need to ask each question once.
- Should we consider boxes for emissions intensity, CWS, other pollutants?
- The criteria should be defined a guidance document.

## Directional Thinking

The AAQ monitoring site selection process will consist of a multi-stakeholder committee that will meet on a regular basis (annually, every 3 years, every 5 years?) and use the decision tool to help with their decision process. The stakeholder committee could consist of representatives from government, industry, NGOs and airshed zones.

#### **General comments**

- These decision tools are good for illustrative purposes can demonstrate to people that we have a process to help us think about the placement of AAQ monitors.
- A site could have greater priority with more 'yeses'.

ACTION 14.4: Rob will incorporate the feedback provided for the decision tool into a next draft.

ACTION 14.5: Matthew will draft a straw dog multi-stakeholder process for the selection of ambient air quality monitoring sites.

ACTION 14.6: The Site Selection Sub-group will develop guidance criteria for the use of the decision tool.

#### 5. Workshop update

Ken provided an update on the progress of the workshop sub-group.

Location: Calgary - TransAlta auditorium with 3 additional breakout rooms

Seating: 60 - 70 people Date: Tuesday June  $6^{th}$ 

Tentative invitation list includes the following organizations:

CAPP	CPPI	Provincial Government
Municipal Government (rural and urban)	Airshed Zones	Alberta Beef
Alberta Road Builders	Sand and gravel guys	NGO (environment and health)
CASA Stakeholders	Health regions	

## ACTION 14.6: The workshop subgroup will develop materials for this June workshop.

#### 6. Other business

a. Co-chairs

David Graham announced that he would be retiring from AENV and thus from the team on July 1st.

- The team expressed their best wishes and noted that his experience and expertise would be missed.
- It was noted that there will be a need for 1-2 new co-chairs from the NGO and/or Government caucus.

## 7. Next meeting

Matthew will poll for the following meeting dates:

Meeting #15 March 14, 15

Meeting #16 April 11, 12, 18 – 21

March agenda items will include:

- Implementation strategy Section 6
- Draft table of contents

# ACTION 14.7: Matthew will poll for March and April meeting dates.

# 8. Adjournment