

## ***Clean Air Strategy Project Team***

### **Meeting #8**

**March 7, 2008**

**CAPP Offices, Calgary**

#### **In attendance:**

**Name**

Jennifer Allan  
Christine Byrne  
Debra Code  
Gerry Ertel  
Tim Goos  
Sharon Hawrelak  
Tony Hudson  
Steve Kennett  
Myles Kitagawa  
Caroline Kolebaba  
Al Mok  
Bettina Mueller  
Kim Sanderson  
Anita Sartori  
Nashina Shariff  
Srikanth Venugopal  
Mike Zemanek

**Organization**

CASA  
Imperial Oil, CAPP  
Enmax  
Shell Canada, CPPI  
Environment Canada  
CASA (by phone for item 2)  
Alberta Lung Association  
Pembina Institute  
Toxics Watch Society (alternate for Martha Kostuch)  
Alberta Association of Municipal Districts and Counties  
Suncor, CAPP  
Alberta Environment  
CASA  
CNRL, CAPP  
Toxics Watch Society  
TransCanada  
Alberta Health and Wellness

#### **With regrets:**

**Name**

Len Bracko  
Long Fu  
Martha Kostuch  
Alex Mackenzie  
Ken Omotani  
Jason Schultz  
Mike Zemanek

**Stakeholder group**

Alberta Urban Municipalities Association  
Alberta Environment  
Prairie Acid Rain Coalition  
Alberta Health and Wellness  
TransAlta  
TransCanada  
Alberta Health and Wellness

#### **Consultants:**

**Name**

Arden Brummel  
Greg MacGillivray

**Organization**

S2S  
S2S

## Action items:

Item	Who	When
8.1: Sharon will ask Calder Bateman to do a quick scan, including checking with municipalities in each area where meetings will be held to find out if other major activities and events are occurring at the time the CASA meetings are planned.	Sharon Hawrelak	
8.2: Bettina will talk to the AENV executive to see if there is a bit more leeway in timing.	Bettina Mueller	
8.3: Team members with ideas about how to structure these sources should send them to Jennifer for distribution to the team.	Team members, Jennifer Allan	
8.4: Arden will forward to Jennifer definitions for issues, goals and outcomes for distribution to the team.	Arden Brummell, Jennifer Allan	
8.5: Jennifer will set up three subgroups to try fleshing out three priority areas. The following were suggested: industry point sources, agriculture and urban design.	Jennifer Allan	
8.6: Jennifer will poll for dates for at least two meetings, one at the end of March and one in April.	Jennifer Allan	

Bettina convened the meeting at 10:10 am. CAPP was thanked for hosting the meeting.

### 1. Administrative Items

The agenda and meeting objectives were approved.

### 2. Public Consultation Plan

A copy of the revised public consultation plan was distributed and Anita reviewed key elements on behalf of the subgroup. Team member comments on the February 21 draft have been incorporated. It was suggested, and the subgroup agreed, that people should be able to make a written submission as well as provide comments via the website and phone. However, this will add about \$7,000 to the cost. Government stakeholders had been omitted in some sections of the plan and have now been included throughout. The draft discussion guide will be prepared by the consultant based on input from the consultation sub-group and will reviewed by the team for accuracy. It was noted that the timelines for this phase may be optimistic.

The plan is to hold seven town hall-style meetings, in Fort McMurray, Grande Prairie, Edmonton, Red Deer, Calgary, Cold Lake/Bonnyville, and Lethbridge. If the meeting is in an area that has an airshed zone, airsheds will be involved. The Airsheds Council has agreed to identify a person to attend future CAS team meetings.

Discussion included:

- In rural areas, it may be difficult to get people out in May and June as that is seeding time.
- July and August also present timing challenges due to summer vacations.

The proposed approach is intended to be flexible and the subgroup will hold town hall meetings during times that will draw the most people – factors such as seeding time will be considered. The proposal also gives people various options to participate so they can have input even if they can't attend a meeting. Newspapers and PSAs will be used to advertise the meetings and the consultation process. Sharon advised that team members will be asked to fan invitations out among their networks.

Some team members wondered if the consultation process was too extensive for the size of the project. However, the team generally felt that the general direction was good and had confidence in the consultants' experience.

Calder Bateman will be responsible for collating and organizing the consultation results, but will not necessarily do the analysis. The subgroup and/or other team members could have a more active role in analysis if they wish.

The consultant needs to consider if other consultations may be occurring at the same time to avoid consultation fatigue on the part of the public.

**Action 8.1: Sharon will ask Calder Bateman to do a quick scan, including checking with municipalities in each area where meetings will be held, to find out if other consultations are occurring at the time the CAS town hall meetings are planned.**

It was noted that some points regarding air quality were raised during the oilsands consultations, and these might be useful for the team to consider. Sharon indicated she has taken a quick look at this material and has concerns about the validity of using material collected for another purpose and context. This material will be reviewed to find the air quality references and determine usability if taken out of that context.

Some concerns were expressed that the timelines are unrealistic. The direction from AENV was to bring forward a new strategy by the end of 2008, and the team is now looking at March 2009. The public consultation timelines are based on those of the project team. Calder Bateman has proposed a plan that they believe to be achievable within the timelines. Sharon indicated there is some flexibility in the plan and if work is not proceeding at a sufficient pace, some adjustments can be made.

**Action 8.2: Bettina will talk to the AENV executive to see if there is a bit more leeway in timing.**

***By consensus, the team:***

- ***Approved the March 5, 2008 version of the consultation plan.***
- ***Agreed to increase the budget for the consultation plan to allow for written submissions, for a budget total of \$197,000 (the original \$190,000 + \$7,000), and approved this expenditure from the team's external account to implement the plan.***

- *Approved Calder Bateman Communications Ltd as the contractor to implement the plan.*

### **3. Structure of the Team's Report**

The facilitator suggested it would be timely to discuss what the team's final product might look like and what could be included. The following general structure was proposed by S2S:

#### **Introduction/ Rationale**

- Why are we doing this strategy now? What's changed? Context for the new CAS (Note Peter Watson's comments to the team that the 1991 strategy was good, but times have changed. We need a new CAS for now and into the future.)
- Refer to discussion about driving forces – what will affect air quality going forward? If we expect continued economic and population growth, those are two clear drivers.
- Accomplishments – what we've done since 1991.
- Recognize long term vs short term actions and goals
- Vision, mission, principles, etc. would go here.

#### **Strategies**

- 1991 plan was mainly about controlling point sources with a strong focus on energy (efficiency, etc.) Cumulative effects was there but most people didn't grasp that concept then. The team has added prevention and control, which could be an overall goal.
- There may be 3-4 big strategies to emphasize – e.g., need to control area sources.
- High level – what governance or management mechanisms do we need to implement these things? For example, CASA and notion of airsheds came out of the 1991 strategy. Could also refer to Water for Life and shared governance.
- These ideas will be the overriding goals – high level, not so much content focused.
- Might need a recommendation here to say how the decision-making process or structure would work (restructure CASA, etc.)

#### **Priority Areas for the new strategy**

- Refer to those identified by the team. Need to turn each of the 2-3 key issues into goals.
- Course of action, everyone reading the CAS can see where they fit and what they can do.
- How to deal with timing? Timelines start to prioritize goals. Do we want to qualify goals in some way?
- Accountability and measurable outcomes.
- Still some debate about how much detail will go in this section.

#### Comments:

##### *Level of detail:*

- Need to elevate the ideas to stay out of the detail, and identify outcomes.
- Would we stop at goals? Would there be a statement that someone does something to achieve them? Need to make this real to ensure the ideas move forward and are more than just a nice set of goals. Otherwise it is just wish list thrown out to the world.

- Could say we need some implementation approaches, but don't start assigning tasks.
- Stay out of the detail. In the 1991 strategy there are probably two or three pieces of brilliance that resulted in many other successes. Find the big things – the pivot points that if you do them, other things will happen.
- Some sectors regard WFL as too motherhoody. Also WFL governance structure is not properly thought through – the decision-making process is not clear.
- There are clear outcomes we are all shooting for, but these could mean different things to different people. We need some motherhood as ideals.

*Outcomes and accountability:*

- Need a component of the strategy so everyone who reads it can locate themselves in relation to the strategy's goals – here's what I can do to affect the outcome. Need a way for them to design course of action.
- Need to look at the 1991 strategy and what didn't get implemented and why. We don't want to put out things that fail again.
- If we define 20 year outcomes, we should know a year or so after the CAS is out, that work is starting. The outcomes should be measurable, have timelines, can be quantified. We should have some mechanism for updating on the progress of the recommendations.

*Timelines:*

- Some goals may need long time to accomplish. We can start now but won't get it all done quickly. Should the CAS have short, medium and long term goals?
- Need to figure out what's possible and feasible. There will be lot more work after the plan to figure out how to implement it.

*Other (final product(s), process forward, role of behaviour)*

- We might need two different documents – a CAS and a report to the CASA board. The strategy would be short (a version for the public that is between the executive summary and full report). Water for Life (WFL) was succinct and easy to understand.
- Would be useful to flesh out one area and put a two-page case study together to use as a model to help frame the other ideas.
- It is important to understand and address behavior and culture. We want people to start thinking about the right way to do the right thing.

Arden noted that the tone of the final document will be very important. Will there be CASA recommendations? Are they about “You should do”, “GOA should do”, “Albertans should do”, etc.? Examples of things that S2S suggested could potentially be included:

- Prevention and control – prevention is where the design elements come in – what things do we need to think about with respect to urban design?
- On the control side, the previous focus was on point sources. We still need to control these, but now need to deal with area sources too.
- Do we talk here about behavior and culture? Role of technology?
- Cumulative effects is overarching – it says there are limits.
- Management, governance and decision processes

#### 4. Indoor Air Quality

Indoor air quality was previously mentioned as a potential priority area. The team discussed the current level of information and issues surrounding indoor air quality.

What is indoor air quality (IAQ)? Is it an issue?

Definition should include: cumulative exposure to substances in the air which adds to total body burden. For example, building materials can lead to higher levels of some toxins (e.g., benzene) in the home that are much higher than outside. Solvents, paints, smoking, materials, fuel, consumer products are sources; also construction materials, mould, radon, ventilation are issues. It is exposure to multiple chemicals and multiple sources.

Will IAQ become more recognized as a public health issue? Are there things that will increase the challenges?

##### Comments:

- IAQ is generally not on the public radar
- It's a jurisdictional morass – no one wants it.
- There is insufficient guidance for behavior – no guidelines that apply to indoor air. Lot of knowledge but hasn't been translated to something that people can act on.
- From human health perspective, will likely increase in importance because we spend so much time indoors. Some effects we're seeing in kids re asthma may be due to what's happening indoors.
- Many people are attentive to IAQ as we look at new building construction, design and codes – learn from earlier experience in sealing buildings – “atmospheric coffins.”
- People who work in this field know it's an issue. If ambient standards say 80 is bad and indoor level read 1000, that can't be good, but we can't speak about it because there are no guidelines.
- There is a lot of scientific information related to measuring IAQ and knowing the levels, but we are missing a link to general guidance about what to do about it. We can't regulate people's activities about what they store and how, so the challenge is how to address the problem.
- It is a difficult area to enforce standards. Government agencies do not have the capacity to go door to door testing indoor air quality levels.

Goal: Educate the public on IAQ issues (how consumer choices can affect IAQ)

#### 5. Energy

What's the scope?

- How energy is used and its relationship to air quality issues. How our use of energy affects the air we breathe.

### Big issues:

- Pollution profiles and environmental impacts of this pollution – what pollutants are coming out of coal-fired stacks and what are the impacts?

### Goals need to integrate with the Alberta Energy strategy

- Overarching goal for energy: pursue development of energy options that minimize air emissions and improve air quality
  - improved energy efficiency
  - more renewable energy
- create regulatory framework and policy options to support these energy options
- distributed and micro-generation

### Information:

- barriers to deployment.
- Alberta-specific research on feasibility and capacity to implement energy options
  - Physical constraints, benefits
- Tradeoffs
  - E.g. how much would X amount of renewable energy reduce emissions?

### Technology issues:

- energy storage
- deployment of existing technology
- energy efficiency technologies – largest gains and largest potential – collateral GHG benefits
- industrial energy efficiency (chemical, upgraders)
- potential related to new energy forms and sources (e.g., algae)
- carbon capture and storage
- coal gasification
- cars to grid technology

### Behavior issues

- What will people tolerate in terms of impact on their behavior?
- Public education to influence industry and consumers (related to energy efficiency)
- Pricing signals
- Smart meters, demand side management to influence behavior
- Ensure there really are alternatives so people can make choices

### Decision Making

- More multi stakeholder processes and involvement
- Incentives, subsidies, policies, regulations (to support behavioral change)

## 6. Area Sources

The team revisited the earlier discussion on categorizing the priorities. There are many different ways to classify the sources:

- industrial, urban and rural.
- Point sources (industry) and non-point sources (urban – cars, design; and rural – agriculture, forestry, road dust)
- Industrial, urban and rural; also sector-specific e.g. agriculture, energy

We need to make sure we capture all the various sources and make the document accessible to the public.

Possible approach:

	Point	Non-point
Urban		
Rural		

**Action 8.3: Team members with ideas about how to structure these sources should send them to Jennifer for distribution to the team.**

## 7. Cumulative Effects

What is it?

- One suggestion with two components:
  1. simple addition of emissions – adding a series of point sources that need to be assessed as if they were one big facility.
  2. cumulative impact – add one stress on another to the same system. These may not be linear. We get a cumulative impact on a receptor when all these are added together. These two aspects are present at the same time, which is why a two-phased approach is important: we manage for air quality, but need to ensure continuous improvement. Standard risk assessment may work for the first part, but when we are talking about synergistic impacts, standard risk assessment doesn't work, so then we have to look at the precautionary approach.
- When two substances combine the effects can be additive or multiplicative, or they could counteract each other.
- Another suggestion, that cumulative effects:
  1. looks at future development,
  2. asks what is the ecological capacity of the airshed, and
  3. usually looks at impacts on a region. These are multiple intensive developments – urban and rural – areas where concentration and intensity of development is a concern.
- Another suggestion, with 3 elements:
  1. Multi source (adding up sources of air pollutants – industry, transportation, indoor, etc.);
  2. multi-pollutant (idea that we are exposed to mixtures);

- 3. multiple routes of exposure (substance emitted to air could end up in food source – exposed to air pollutants not just through inhalation); impacts that could arise due to use of technology such as coal gasification (e.g., may improve the air, but could have impacts on land – holistic life cycle approach)
- Have mix of local and long range transport – impact can vary with the region and the pollutant. “Regional” depends on the system.

#### How do you implement cumulative effects?

- On an airshed basis? Albertan airsheds are really local monitoring areas – some are trying to move to management. Geographic or meteorological airshed is much bigger than the airshed zones in Alberta.
- Need a different set of management solutions and tools to manage air quality in different areas – for example, the industrial heartland vs Edmonton. Need a way to manage across the areas and communicate with each other. Some point and non-point sources are in both.
- Looking at all emissions in industrial heartland not just industry point sources – this is layered and we need to look at how cars in Edmonton contribute to emissions in industrial heartland, for example.
- Notion of a nested regional management system; e.g., Edmonton and industrial heartland. Even if there are cumulative effects, they have to be managed in a segregated way. Separate sources, different solutions, but should all contribute to managing the cumulative effect.
- Any activity that affects air quality in an airshed needs to be taken into account, but may not be under the same management system. Need to share burden too.
- Need to define the threshold – additive focused, impacts focused, natural vs manmade.
- How should caps be set? Based on what? Pollutants? Boundaries?

#### Who is involved in the management system? Who sets the standards?

How to decide at what level something becomes a serious problem and what happens if you go over? What happens when and to whom? If look at additive approach, we can figure out who’s putting in what, but if air quality gets too low, what will be done?

- Europe has smog plans – if air quality is too poor, you can’t take your car, have to reduce production, etc.
- We don’t need to design solutions, but identify that we need to figure out what to do if certain levels are reached to ensure exceedances are dealt with.
- Need trigger points when we start to approach limits, however they are defined.
- After limits are set, under what circumstances would you change them?
  - New information on environmental or health impacts
  - Could put in trigger that allows for exceptions, certain economic conditions, episodes.

Need rules for all of these cases. We might not want that level of detail in the strategy.

Notion of market based mechanisms to reduce pollutants (cap and trade, cap, tax)

When a new plant wants to come in to an area, how will it be handled?

- Over time, implement technology improvements that allow you to continue producing with a lower impact on the environment, which creates room for growth.
- As long as we drive continuous improvement, even when we are below the limits, we ensure room for new growth and prevent current players from using pollution to prevent market entry to new players (allow for new growth and eliminate competitive gaming). This is also applying the precautionary principle and leaves some room in case the science isn't perfect.
- There are emissions caps and there are air quality thresholds.
- We need to consider the longer term when allowing new plants to come in. Industry doesn't want to be told what it's building today is not adequate for the future because we didn't look out far enough.
- What is the responsibility for old plants when plant 4 goes in and we want them to also accommodate for plant 5? At some point the old plant will have to upgrade, but there must be reasonable approaches for grandfathering and acknowledging capital investment.
- The industrial heartland doesn't allocate emissions under a cap, but the overall aim is to keep emissions below a limit.
- Where do people come into this? Who decides? In Municipal Development Plans, land can be taken out of agriculture for industrial use, but air quality is not considered in that process. People should have some say in this process.
- Should be some consultation within certain limits.
- When do you use which process – should the process for setting a cap be collaborative, negotiated between business and government, or something else?
- At a strategic level, we should talk about how to define boundaries for the airsheds or management zones.
- Also need to think about process for setting the threshold.
- And need to build some flexibility in the policy.

## 8. KEY STRATEGIC THRUSTS

Previously in the meeting, the team discussed having pivot points, or key thrusts, of the strategy that emerge out of the priority areas. These were viewed as very high level themes to guide the strategy.

The team then brainstormed possible key strategic thrusts:

- Four cross-cutting themes have been identified: information, technology, behaviour, and decision making process.
- If we focus on air quality and what is very critical, AENV/GOA has to live up to their obligations and be accountable, we must have continuous improvement, and we have to look at broader sustainable development thinking to consider social and economic elements. At a very high level, multi-stakeholder consultation is a very important element for whatever strategy we come up with. The strategy needs to have boundaries. But in the end, it's not necessarily a consensus decision; the GOA has the final say.
- Issue of management and decision making is a key strategic area to pursue.

- Could say CAS has three thrusts:
  - efforts to alter behavior to have better outcomes, or focus on better technology;
  - have to have a multi-stakeholder approach to implementation;
  - management system which does the following: a,b,c.
- Want these to cut across and apply to all the areas; e.g., if cumulative effects is a key thrust it would apply across all areas.

The team felt that once these ideas are more fully developed, some common areas will likely emerge as the key thrusts.

## 9. Future Work

The team felt that at least one small group should be formed to work on scope, goals and examples of outcomes (maybe measurable) for a given priority area. There was a caution for the small groups to remember that a goal is a desired outcome, not a 'how to' get to a desired outcome. The small group should present to the team the goals and a short list of priorities to pursue, as opposed to re-doing the brainstorming already completed.

There is also a small group working on the beliefs, principles and values that is open if anyone else would like to join.

Further clarity is needed on what is meant by goals, issues and outcomes so the team has a common understanding. There could be many options for how to achieve the outcomes or goals.

The team discussed future information needs. Identified topics were: forestry (see meeting 7 action item); transportation; agriculture; biogenic and anthropogenic sources. The team previously identified the Water for Life strategy as a possible presentation; however, they felt that the document was accessible enough for team members to read on their own.

Some team members felt it would be useful to poll for dates until the end of the year.

## 10. Next Steps

**Action 8.4: Arden will forward to Jennifer definitions for issues, goals and outcomes for distribution to the team.**

**Action 8.5: Jennifer will set up three subgroups to try fleshing out three priority areas. The following were suggested: industry point sources, agriculture and urban air quality.**

**Action 8.6: Jennifer will poll for dates for at least two meetings, one at the beginning of April and one at the end.**

The meeting adjourned at 3.45.