

December 12, 2013

Board of Directors Meeting

ABOUT CASA

Vision:

The air will have no adverse odour, taste or visual impact and have no measurable short or long term adverse effects on people, animals or the environment.

Mission:

The Clean Air Strategic Alliance is a multi-stakeholder alliance composed of representatives selected by industry, government and non-government organizations to provide strategies to assess and improve air quality for Albertans, using a collaborative consensus process.

Administration

Statements of Opportunity

Project Management

Airshed Zones

Communications

New/Other Business

**Clean Air Strategic Alliance
Centre West
10th Floor Boardroom
10035 – 108 Street
Edmonton, Alberta
December 12, 2013**

Draft Agenda

	1.0 ADMINISTRATION PART I	1
9:00 – 9:30 (30 min)	1.1 Convene Business Meeting and Approve Agenda <i>Objective: Convene business meeting and approve agenda.</i>	
	1.2 New Representatives <i>Objective: Introduce and welcome new CASA board representatives.</i>	
	1.3 Minutes & Action Items from September 19, 2013 Board Meeting <i>Objective: Approve minutes and review the action items from the September 19, 2013 board meeting.</i>	
	1.4 Executive Director's Report/Financial Statements <i>Objective: Receive a report on secretariat activities and income and expense statements.</i>	
	1.5 Core Budget for 2014 <i>Objective: Approve the proposed budget for 2014.</i>	
	1.6 Proposed Schedule for 2014 Board Meetings <i>Objective: Determine meeting dates for 2014.</i>	
	2.0 STATEMENTS OF OPPORTUNITY	2
9:30 – 10:00 (30 min)	2.1 Non-Point Sources Workshop Update <i>Objective: Receive an update on the Non-Point Sources Workshop</i>	
	3.0 PROJECT MANAGEMENT	3
10:00 – 10:45 (45 min)	3.1 Human and Animal Health Team <i>Objective: Hear an update on activities and disband the team.</i>	
10:45 – 11:00 (15 min)	BREAK	
11:00 – 11:15 (15 min)	3.2 Status Reports <i>Objective: To receive information on project activity.</i> <ul style="list-style-type: none"> • CASA & AAC Joint Standing Committee • Electricity Framework Review Team • Odour Management Team 	
	4.0 Airshed Zones	4
11:15– 11:45 (30 min)	4.1 Alberta Capital Airshed <i>Objective: Receive a request from the Alberta Capital Airshed for CASA endorsement.</i>	
	5.0 COMMUNICATIONS	5
11:45 – 12:00 (15 min)	5.1 Report on 2013 Activities <i>Objective: Hear a report on communication activities in 2013.</i>	

	6.0 NEW/OTHER BUSINESS	6
12:00 – 12:15 (15 min)	6.1 New/Other Business <i>Objective: Introduce new business and/or complete any unfinished business of the day.</i>	
	6.2 Updated Board Mailing and Membership Lists <i>Objective: Provide up-to-date information on CASA board members.</i>	
	6.3 Project Team & Committee Membership Lists <i>Objective: Provide a current list of members on project teams and committees.</i>	
	6.4 Evaluation Forms <i>Objective: Provide time for board members to fill out their evaluation forms.</i>	
12:15 – 1:15 (1 hr)	LUNCH	

INFORMATION SHEET

ITEM: 1.2 New Representatives

ISSUE: One new director and one new alternate have been chosen by their respective member organizations as representatives on the CASA board.

STATUS: **Claude Chamberland** from the Canadian Association of Petroleum Producers has been appointed as the director representing Industry – Oil & Gas – Large Producers.

Peter Noble from Imperial Oil has been appointed as the alternate director representing Industry – Petroleum Products. Peter replaces Cindy Christopher.

ATTACHMENTS: A. Biography of New Member(s)

Biography

Director

**Claude Chamberland
Canadian Association of Petroleum Producers**

Claude has recently retired from his position as an Industry and Government Affairs manager with Shell Canada Energy- Heavy Oil. In his previous role, he participated in the development of public policies related to the Environment, with a focus on air emissions, water use, land and biodiversity. Claude also supported Shell operations in Alberta in providing expertise towards minimizing Shell's environmental footprint.

Over the past 12 years, he has actively participated in many multi-stakeholder committees, such as the CASA PM and Ozone team, and has been very active in several industry associations, including CAPP.

He holds a B.Sc. in Civil Engineering from Université Laval and he lives in Calgary with his wife Jacinthe. Claude has over 32 years of experience in the oil and gas industry and he is currently acting as a consultant.

Biography

Alternate Director

**Peter Noble
Imperial Oil – Public Policy & Regulatory Affairs, Products & Chemicals Division**

Peter graduated from the University of Toronto in 1989 with a Bachelor of Applied Science in Chemical Engineering, and joined Imperial Oil immediately after graduation. He has held various technical, planning and management roles at the Sarnia Chemical Plant and at Imperial's Head Office in Toronto and then Calgary, in the areas of operations, supply chain, business planning, research and development, and safety/health/environment.

Peter's current role is senior regulatory affairs manager for Imperial's refining and chemical businesses, supporting public policy development, and he has been based in Calgary in this role since 2011. He is also the Responsible Care Coordinator for Imperial's petrochemicals business. Peter has been a member of Professional Engineers Ontario since 1993 and a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 2012. He also served as a member of the board of the Canadian Plastics Industry Association, and has held leadership positions within the Chemistry Industry Association of Canada, American Chemistry Council and Canadian Fuels Association.

DECISION SHEET

- ITEM:*** 1.3 **Minutes and Action Items from September 19, 2013**
- ISSUE:*** Minutes from the September 19, 2013 board meeting are subject to approval.
- STATUS:*** Members have received the minutes from the September 19, 2013 board meeting and are invited to report any errors or omissions to the board at its December 12, 2013 regular meeting. Board members will be asked to give final approval to the minutes of September 19, 2013 and the final version will be posted to the website as per usual practice.
- At the March 29, 2012 meeting it was agreed that the board action items will be reviewed immediately following the minutes.
- ATTACHMENTS:*** A. Draft meeting minutes from September 19, 2013 board meeting.
 B. Board Action Items
- DECISIONS:*** Approve the minutes from the September 19, 2013 board meeting.

Draft Minutes

CASA Board of Directors

September 19, 2013

Calgary, Alberta

In attendance:

CASA Board Members and Alternates:

Brian Ahearn, Petroleum Products
Leigh Allard, NGO Health
Humphrey Banack, Agriculture
Ann Baran, NGO Wilderness
Rob Beleutz, Mining
Elise Bieche, Oil and Gas Large Producers
Bill Calder, NGO Urban
Cindy Christopher, Petroleum Products
Dawn Friesen, Provincial Government Health
Jim Hackett, Utilities
David Lawlor, Alternate Energy
Yolanta Leszczynski, Chemical
Manufacturers
Audrey Murray, Provincial Government
Energy
Al Schulz, Chemical Manufacturers
Chris Severson-Baker, NGO Pollution
Rich Smith, Agriculture
David Spink, NGO Wilderness
Don Szarko, NGO, Consumer Transportation
Don Wharton, Utilities
Tim Whitford, Local Government Urban
Ruth Yanor, NGO Pollution

CASA Secretariat:

Celeste Dempster
Alison Hughes
Robyn Jacobsen
Norman MacLeod
Michelle Riopel
Karen Sigurdson

Presenters:

Norman MacLeod, CASA (*Item 1.4, (Executive Director's Report/Financial Statements)*)

Robyn Jacobsen, CASA (*Item 2.1, (Risk Management Plan)*)

Lisa Sadownik, AESRD (*Item 4.1, (Government Initiatives)*)

Guests:

Lisa Sadownik, ESRD
Martina Krieger, ESRD
Sharon Willianen, ESRD

Regrets:

Rick Blackwood, Provincial Government
Environment
Tom Burton, Local Government Rural
Martin Chamberlain, Provincial Government
Energy
Brian Gilliland, Forestry
Holly Johnson-Rattlesnake, Aboriginal
Government First Nations
Carolyn Kolebaba, Local Government Rural
Neil MacDonald, Provincial Government
Health
Keith Murray, Forestry
Christine Best, Federal Government
Mary Onukem, Aboriginal Government
Métis
Janis Seville, NGO Health
Dan Thillman, Mining
Martin Van Olst, Federal Government
Scott Wilson, NGO, Consumer
Transportation
Dana Woodworth, Provincial Government
Environment

**Clean Air Strategic Alliance
Board of Directors Meeting
September 19, 2013**

Executive Summary

The CASA board welcomed the following new members: Rob Beleutz from Graymont Western Canada Inc., and Christine Best, from Environment Canada (as interim director until October).

CASA continues to work on the 2013 Electricity Review and the Odour Management projects. Planning is underway for the non-point source air emissions workshop, to be held on October 22, 2013 in Calgary. Preparations are also being made for CASA's 20th anniversary celebration scheduled for June 2014. The Secretariat has undergone some staffing changes, with the departure of Kaylyn Airey and Struan Robertson.

Mid-year expense statements indicate that CASA's budget for 2013 remains on track, consistent with the roll-out of new projects, related support for building collaborative skills, and several communications initiatives.

The board received an update on the development of a CASA Risk Management Plan, and established a committee to work with the Secretariat. A draft report from this committee will be presented to the Board for their review and approval at the June 2014 Board meeting.

The provincial government provided a report on progress regarding the Integrated Resource Management System (IRMS) as well as the Clean Air Strategy.

**Clean Air Strategic Alliance
Board of Directors Meeting
September 19, 2013**

Draft Minutes

1 Administration

1.1 Convene Business Meeting and Approve Agenda

Chris Severson-Baker convened the meeting at 9:10 a.m. and the agenda was approved by consensus.

1.2 Minutes and Board Action Items from June 6, 2013

The board approved the minutes by consensus.

Action: Planning is underway for the non-point source air emissions workshop, to be held on October 22, 2013 in Calgary.

1.3 New Representatives

The board welcomed the following new members and invited them to introduce themselves:

- Rob Beleutz, Environmental, Health and Safety Manager at Graymont Western Canada Inc., replacing Peter Darbyshire as the director representing Industry-Mining. He is based out of the company's head office in Richmond, British Columbia and responsible for providing corporate and regional environmental, health, and safety support for lime manufacturing, limestone quarries and a landfill operation.
- **Christine Best**, who was not able to attend this meeting, is the Acting Associate Regional Director General, Environment Canada. She will replace Mike Norton as the director representing the federal government until October 2013, when Environment Canada will appoint a permanent replacement.

Biographies were provided for Rob Beleutz, Christine Best, and Scott Wilson (not previously available).

1.4 Executive Director's Report/Financial Statements

Last night, a reception was held to honour the work of departing board members Cindy Christopher, Peter Darbyshire, John Squarek, and Bev Yee, a celebration of their considerable contribution to CASA.

Work continues on the 2013 Electricity Framework Review and the Odour Management Team. Both of these projects are transitioning from discussions about process to a focus on substance. The non-point source emissions workshop is scheduled for October 22, 2013 in Calgary.

The secretariat is nearing completion of its project to create a searchable database of its documents that can be used to inform: stakeholder inquiries, project research, focused reports to the board and periodic performance measurement. System testing and refinement is underway, and once the searchable database is in place, a presentation will be provided for the board and other interested parties, likely in December.

Preparations for CASA's 20th anniversary in June 2014 continues. This celebratory event will bring past and present stakeholders together to honour their contributions. Plans also include hard copy products (ex. case studies, MCP guide, project successes) and an elevated public and social media presence.

Mid-year expense statements indicate that CASA's budget for 2013 remains on track, consistent with the roll-out of the new projects, related support for building collaborative skills, and several communication initiatives.

There have been two staff changes at the secretariat: Program Coordinator, Struan Robertson, has departed to attend law school in September; and Communications Advisor, Kaylyn Airey, has moved to a new job with Alberta Parks managing stakeholder interest in post-flood restoration in the Kananaskis area. The secretariat is exploring replacement options such as hiring interns or consultants, and use of a GoA secondment.

Discussion:

- The question of communications project team management was raised in light of Kaylyn's departure. Norm indicated that he will be facilitating the team until a replacement is found.
- The issue of core funding beyond 2014 was raised. Norm indicated that his practice is to begin the "ask" to the Government of Alberta in August of each prior year (ie. August 2014 for April 2015 funding). If funding is to be sought from other sources (i.e. industry members), discussions need to begin sooner. It was also suggested that revenue/grant planning could be done on a 3-5 year cycle. Norm agreed to work on a funding plan to bring back to the Board in spring 2014. Lisa Sadownik will advise the ESRD grant funding group of CASA's 2015 funding need. The Alberta Motor Association may be able to provide some funding for examining non-point sources provided that sufficient notice is given.

Action: Norm will develop a funding plan/options to address core funding beyond 2014, including partners other than the Government of Alberta, to share with the Board in spring 2014. (Based on the discussion on funding in Agenda Item 3.1, this plan should include options for project funding and the possibility of a more coordinated approach across projects.)

2 Strategic Planning

2.1 Risk Management Plan

The final version of the 2012 Strategic Plan was approved by the Board at the March 2012 meeting. At this time, the Strategic Plan contained a placeholder for the development of a Risk Management Plan. Going forward, this risk management plan would be appended to the Strategic Plan and reviewed as part of CASA's strategic planning cycle.

As an introductory exercise, Board members brainstormed potential risks that CASA faces. A sample of the risks identified included:

- Stakeholder capacity and fatigue
- Changes in government
- Barriers to consensus

A record of the brainstormed risks will be used as input into the risk management planning process.

Robyn provided a short presentation addressing the basics of risk management, its history at CASA, why it is important, and next steps. CASA has previously done some risk identification through SWOT analyses, futures work (with Foresight Canada), the environmental scan conducted by the University of Alberta, the 2011 Mission Review, and anecdotal discussions.

It was recommended that a board committee be established to develop a Risk Management Plan, to be presented to the Board at the June 2014 meeting. Time commitment for committee members is expected to be 2 full-day meetings (one in the fall and one in the new year). The following members volunteered to participate on this committee: Rich Smith, Ann Baran, Bill Calder, David Lawlor, Al Schulz, Norman MacLeod, Lisa Sadownik (or alternate Government of Alberta representative), and Elise Bieche.

By consensus, the board agreed to establish a committee to prepare a Risk Management Plan to be discussed at the board meeting in June 2014.

3 Project Management

3.1 Status Reports

The Board was directed to the status reports in the board binder.

2013 Electricity Framework Review: A clarification was added to the status report that the team has agreed to consider developing options for adapting the current framework – there is not agreement as to whether changes will be required.

Odour Management Team: Team Members present at the meeting indicated task group formation has been delayed as there is no industry representation on 2 of the 3 task groups (which are subgroups of the main Odour Management Team). Industry representation is important to ensure that the full range of interests is represented. A main concern for

industry participants on the team and task groups is capacity. It was also noted that funding has not been secured for the team. ESRD announced that a \$150,000 grant for the team has been approved in principle. It was noted that industry is expected to contribute a commensurate amount.

These comments led to a broader discussion around requests for team funding:

- Industry commented that it is difficult to respond to funding requests from multiple teams and that it would be helpful if requests could be forwarded in a coordinated way. In addition, key messages highlighting the importance and relevance of CASA teams could be effective in achieving support for the “ask”.
- It was noted that all sectors should seriously consider their contributions to CASA, as our model of addressing issues is a cost-effective option, when considering the alternatives, such as public inquiries.
- The following suggestions were made to help better manage funding and human resource requests going forward:
 - Address these requirements more comprehensively in the Statement of Opportunity.
 - The Executive Committee should be updated on the status of funding and team membership between Board meetings.
 - An update/discussion on funding requirements could be a standing agenda item of the Industry Caucus.
- It was noted that the Alberta Energy Regulator has initiated a public inquiry on the odour issue in the Three Creeks area.

Non-point Source Air Emissions: Invitations to the Non-point Source Air Emissions Workshop on October 22 in Calgary were sent out on September 18. The Board would like to review the invitation list to ensure that key people have been included. There should be a mix of technical experts and strategic thinkers.

Board members discussed workshop objectives and agreed the workshop should focus on:

- Developing a common understanding of non-point source air emissions and their regulation/management in Alberta.
- Identifying needs and gaps regarding non-point source air emission management in Alberta
- Identifying promising areas of work, where CASA could add value.

Action: Secretariat to e-mail board members the workshop objectives and invitation list for review and comment by September 27th.

4 Government Initiatives

4.1 Government Initiatives

The Board was directed to the Integrated Resource Management System (IRMS) Information Sheet and presentation provided in the board binder.

Lisa Sadownik provided an update on the provincial government’s IRMS as well as the Clean Air Strategy.

IRMS

The IRMS is one of six focused agenda items for the Government of Alberta. It is the means by which Alberta will achieve responsible resource stewardship, setting and achieving the environmental, economic and social outcomes Albertans expect from resource development and maintaining the social licence to develop resources and expand market access. The system incorporates the management (i.e., conservation and wise use) of all resources including energy, minerals, forestry, agriculture, land, air, water and biodiversity.

Current priority initiatives include:

- **Regional plans:** The government is currently implementing the Lower Athabasca Regional Plan in the oil sands region and has received a draft of the South Saskatchewan Regional Plan for southern Alberta. Development of Alberta's three other regional plans is being initiated.
- **Merger of Environment and Sustainable Resource Development:** ESRD is focused on strategy, policy, planning, and operational delivery for air, land, water, biodiversity, forestry and emergency response.
- **Regulatory Enhancement:** The Alberta Energy Regulator (AER) has been established. The process has begun to shift regulatory responsibility from other departments to AER, and will continue over the next year. Work will start on *Public Lands Act* regulation in November 2013.
- **Environmental Monitoring:** Legislation is being tabled this fall to establish the Alberta Environmental Monitoring and Reporting Association (AEMRA). The management board is in place, and a CEO will be named in the fall.
- **Aboriginal Consultation Office:** Aboriginal relations for the provincial government have been consolidated into one centralized office. This change will come into effect November 1 2013.
- **IRMS Enterprise Architecture:** GoA will be responsible for planning and policy. The monitoring agency will be responsible for data collection and monitoring. AER will be responsible for regulation.

Clean Air Strategy

Lisa provided an overview of the activities contributing to 4 key actions in CAS

Implementation Plan:

- Implementation of the National Air Quality Management System continues. Canadian air quality standards have been established for PM and ozone, and are being developed for NO_x and SO_x.
- The National Mobile Source Working Group gained approval to proceed at the Canadian Council of Ministers of the Environment meeting.
- Six national airsheds have been established and all provinces are now determining how these zones will be further broken down within their borders. Alberta will follow the regions identified in the Land-use Framework. Environment Canada is developing an associated regulation. Since provinces will be responsible for ensuring the requirements of the regulation are met, ESRD is working with the federal government to have input into the development of the regulation.

- The Alberta Air Quality Health Index has been established.
- The implementation of actions related to non-point sources in the Clean Air Strategy is one of the biggest challenges ESRD faces.

Discussion:

- It was noted that several of Alberta's airsheds are financially stressed due to funding shortfalls, and may be forced to end operations. Several members emphasized the importance of keeping the existing system functioning during this transitional period.
- As work is undertaken to operationalize the AQMS, some concern was expressed about the extent to which CASA's work and the GoA's discussions with the federal government have influenced the development of federal policy.. It was suggested that the GoA review the instances where CASA has successfully influenced federal policy and use these examples to increase the likelihood of improved interaction going forward.
- Lisa was asked to consider if, from the Government of Alberta's perspective, CASA is on the right track, and what if anything is missing from the current range of CASA projects and activities. The board would like to confirm that CASA's efforts are aligned with GoA interests.

5 Communications

5.1 CASA's 20-Year Celebration

See item 1.4 Executive Director's Report.

6 New/Other Business

6.1 New/Other Business

No new/other business was introduced.

6.2 Updated Board Mailing and Membership Lists

Members were asked to provide the secretariat with up-to-date information on CASA board membership.

6.3 Evaluation Forms

Members were asked to complete evaluation forms for the September 19, 2013 meeting. These responses are valued and will be reviewed by the Executive Committee at its next meeting.

The meeting adjourned at noon.

The next CASA board meeting will be on December 12, 2013 in Edmonton.

**Board Action Items
For Discussion – December 12, 2013**

Action items	Meeting	Status
<p>2.1 – Management of the Non-point Source Air Emissions in Alberta Secretariat to organize a workshop to be held in the fall of 2013. Draft workshop key objectives and deliverables should be circulated to board members for comments, and pre-reading material including existing data must be distributed for review before the workshop.</p>	June 6, 2013	Complete.
<p>1.4 – Executive Director’s Report/Financial Statements Norm will develop a funding plan/options to address core funding beyond 2014, including partners other than the Government of Alberta, to share with the Board in spring 2014. (Based on the discussion on funding in Agenda Item 3.1, this plan should include options for project funding and the possibility of a more coordinated approach across projects.)</p>	September 19, 2013	Carried Forward.
<p>3.1 – Status Report Secretariat to e-mail board members the workshop objectives and invitation list for review and comment by September 27th.</p>	September 19, 2013	Complete.

INFORMATION SHEET

ITEM: 1.4 **Executive Director's Report/Financial Statements**

ISSUE: 1. **Executive Director's Reports**

ATTACHMENTS: A. Executive Director's Information Update

ISSUE: 2. **Financial Reports**

ATTACHMENTS: B. Status of Revenue and Grants – September 30, 2013
C. Consolidated Core Expenses – September 30, 2013

Executive Director's Report

Key Events and Initiatives

Overview

- Following board direction, the secretariat convened a workshop in October to further scope and refine potential work for a Non Point Source (NPS) Project Team. The workshop was well attended by stakeholders and the workshop resulted in a more focused and prioritized set of NPS deliverables for the Board's consideration in December. Convening a new NPS project team, taken together with existing project work, will fully commit CASA resources available to support stakeholder discussions in 2014. It should also be noted that the quality and pace of project team work is always limited by the funds available to gather related technical information. The NPS file will have the same limitations.
- CASA's bylaws require that its directors review the performance of the society every three years (see attached briefing doc from 2010 for context). The last performance review having been completed in mid 2011, the Board is again required to conduct a review in 2014. In the past, these reviews have taken many forms, ranging from the establishment of a short-term task group, through to retaining the services of external consultants that reported to the Executive and Board. The Board will have to decide in early 2014 how it wishes to proceed with the review and give its approval for the process to begin. Typically this work has been done at the same time as an update of CASA's strategic plan. Since a small ad hoc group has already been created to conduct a risk assessment for the alliance (as an appendix to the plan), the Board may simply want to consider expanding this group's mandate or seek other efficiencies in getting this work done. Once the review is complete, Board members have normally discussed the results in caucus and then determined if they remain committed to the alliance and its work.
- CASA has retained the services of a full service communications and advertising firm to oversee the planning and roll-out of CASA's 20th anniversary in 2014. Following direction received from the Communications Committee and the Board, planning is now focused on refining specific elements of the celebration (i.e. the board mtg. itself, a stakeholder reunion and conference). Once early design work on the principal events is sufficiently advanced, the Secretariat will ask for further guidance from the Communications Committee. Hard copy products (e.g. CASA case studies, the Managing Collaborative Processes guide, a summary of project successes) will be integrated with planned

events, as part of a consolidated, single communications plan. Stakeholders should anticipate an increase in CASA's visibility and an elevated social media presence.

- The Secretariat has completed its work to create a searchable database that can be used to: inform stakeholder inquiries, report to the Board and conduct periodic performance measurement. "Back-end" searchable tables and "front-end" query forms have been prepared and system testing is complete. The Secretariat anticipates that this searchable database will significantly improve our ability to generate information about the work of past project teams, bring forward outstanding implementation requirements and provide context for current stakeholder discussions. Prior to the development of this capability all such information had to be generated manually. Some work remains to populate the back end tables.

Finance

- Financial statements to the end of September indicate that CASA's internal expenditures are marginally under budget, and are directed primarily at the roll-out of the new projects, related support for building collaborative skills and several communications initiatives. As usual, the Secretariat must assume that each project team will continue to draw on facilitation and meeting support uninterrupted to year end and we budget accordingly. Subject to the pace of project team work in the last quarter of 2013, CASA may spend all funds allocated to project support, for the first time in many years.
- Revenues on CASA's term investments continue to be marginally higher than in previous years, a function of CASA having received 2 years of internal funding in the spring of 2013. Through the use of cashable longer term investments we are able to get a greater return on investment while still meeting liquidity requirements. Based on current forecasts, CASA could continue to operate through fiscal 2014 drawing on existing funds. At the September Board meeting, directors indicated that they would like to maintain this financial buffer in subsequent years. The Board anticipates having a more comprehensive discussion about CASA's financial sustainability in early 2014.

The Secretariat

- The Secretariat maintains the ability to support three large-scale projects, several standing CASA committees and what is anticipated to be a heavy communications workload in late 2013 through 2014. Delivery of all operational plan requirements will be met through a mix of 6-7 full-time staff and contract help.
- After 7 years with the Secretariat, Alison Hughes will be moving on, in pursuit of new challenges in Calgary. CASA will miss her greatly. We have hired a temporary replacement and have arranged a 3 month overlap to train the new hire before Alison's departure. This transition is underway and seems to be unfolding as planned.

- CASA is continually looking for talented and motivated individuals with an interest in learning the art and craft of multi-stakeholder facilitation and project management. Please let us know if you are aware of interested candidates.

INFORMATION SHEET

Reproduction from 2010

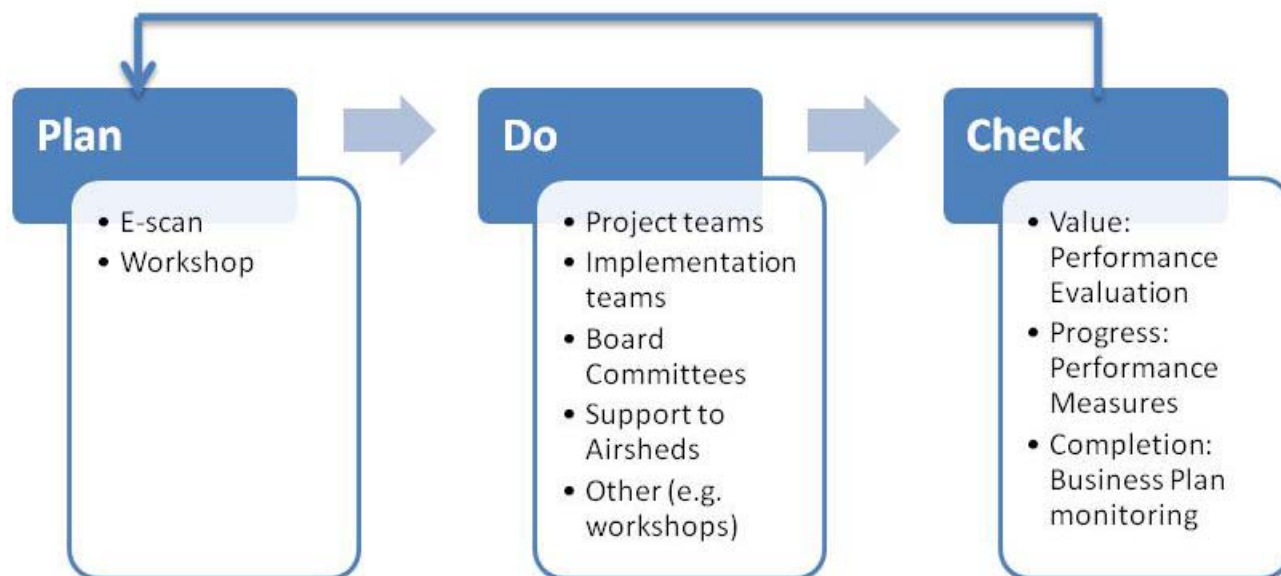
ITEM: Strategic Planning Cycle

ISSUE: Clarify CASA’s current strategic planning cycle and develop overarching direction for future strategic planning

BACKGROUND: At the June 2010 Board meeting, Board members expressed a desire for an overarching plan guiding strategic planning processes at CASA. CASA has used a ‘Plan, Do, Check’ system in all its planning, although we haven’t explicitly used those terms.¹ According to the cycle, 2010 is a year to “check,” or evaluate, CASA’s progress through the Performance Evaluation Committee (PEC) and Performance Measures Committee (PMC). However, 2010 is also the first year of a new business plan. This mismatch creates confusion where CASA should be in its overall strategic planning. This document outlines the tools currently used at CASA and their schedule, concluding with recommendations how to proceed.

STATUS: Figure one shows the tools currently employed by CASA to plan, conduct and check the organization’s progress toward its vision. The planning tools determine the overall direction to be implemented through teams, committees, etc. The ‘tools to check’ measure CASA’s progress on numerous scales, providing information useful to identify future priorities.

¹ See Attachment A for a diagram of CASA’s planning cycle from the 2003-2005 Business Plan

Figure 1: CASA's Planning Cycle**Tools to Plan:**

1. Strategic planning workshop: Every 3 years, CASA holds a two-day board meeting to facilitate strategic planning. These retreats are timed so the information from the PMC and the PEC are available.
2. Environmental scan (e-scan): The e-scan is a process to identify the key drivers and potential future scenarios that will impact CASA. The process will ensure the CASA Board has a solid foundation for strategic conversations about these potential future scenarios.

Note: Scanning for emerging trends and policy initiatives should not be limited to the e-scan every 3 years. The strategic planning section of each Board meeting has been used to hear presentations and have conversations about new activities or research that could influence CASA.

Tools to Check:

1. Performance Evaluation Committee: Every three years, the CASA board approves a question that will assess CASA's value. The evaluation is a qualitative assessment of the organization intended as a "sunset clause" in CASA's bylaws meant to re-affirm commitment of stakeholders and relevancy of the organization. The PEC should directly or indirectly ask, "Does CASA continue to provide value to its members?"
2. Performance Measures Committee: Every three years the committee calculates indicators deemed representative of areas of CASA action. These include ambient air quality trends, emissions trends, monitoring capacity and stakeholder satisfaction. Annually, the degree of implementation of CASA recommendations and recognition is

calculated. The evaluation is a quantitative assessment which answers the question “is CASA making progress in achieving its vision and mission?”

3. Business plan operational assessment: The secretariat will report to the Board of Directors annually on progress made toward achieving the strategies and actions scheduled for that year. The assessment provides the opportunity to ask “have we completed our tasks?”

Tools to Do:

1. Project teams: For the development of policy, or other input to the air quality management system, upon approval of a statement of opportunity by all CASA stakeholders
2. Implementation teams: Provides oversight of implementation of CASA recommendations
3. Board committees: Advances the organization, rather than the air quality management system.
4. Other: Ongoing support to airsheds, workshops, symposia, special board meetings, etc

Timing:

The cycle is a three-year loop. The PMC and PEC work is conducted every three years to inform the workshop the following year. The timeline below compares the cycle to the new Business Plan.

Tool	2010	2011	2012	2013	2014
Performance Measure Committee					
Performance Evaluation Committee					
Two-day strategic planning workshop					
E-scan*					
Business Plan					

*The timing of the e-scan beyond 2010 has not been determined. Regular scanning of upcoming trends and initiatives should be conducted.

There are two timing issues as shown in the chart above. First, the strategic planning workshops (2011, 2014) occur mid-way through the business plan. Second, the business plan ends 2012, leaving a gap in 2013 and 2014.

OPTIONS:

The direction from the Board was to develop a plan incorporating the current initiatives leading up to the June 2011 strategic planning workshop. The recommendations below all involve altering the timing of the Business Plan rather than changing the cycles of all the other planning and checking activities. The goals in the Business Plan are at a strategic level and robust. They are unlikely to radically shift year to year

although the strategies to achieve them may change as CASA defines its role in the air quality management system.

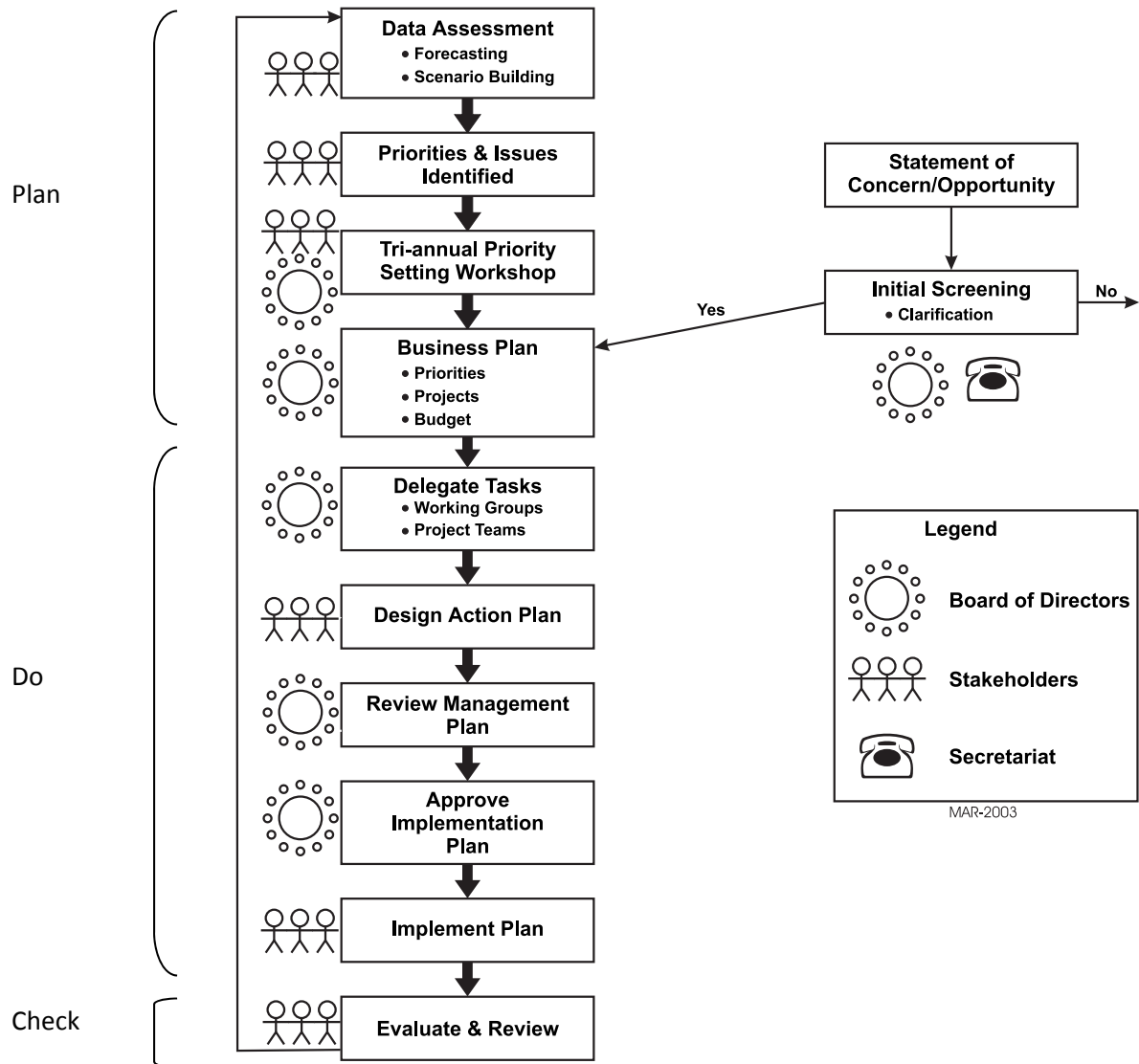
1. Extend the current Business Plan to 2014, with annual updates
2. Truncate the current Business Plan and create a new 2012-2015 plan
3. Hold a smaller session in 2013 to extend the Business Plan to 2014.

RECOMMENDATION:

The recommendation is to adopt option 1. The first Business Plan update should be June 2011 as a direct result of the strategic planning workshop. Stakeholder review on the updated Business Plan would occur over the summer 2011 with a report back, and approval, in September 2011.

ATTACHMENTS: A. CASA's Process from the 2003-2005 Business Plan

Attachment A: CASA's Process (2003-2005 Business Plan)



<u>Revenue</u>	<u>Amount</u>	<u>Note</u>
Grants Carried Forward from 2008	\$578,248	Includes Pre-payment for 2009 Operations from Alberta Environment
Grants Received in 2009		
Alberta Energy - 2nd Quarter Pre-Payment	\$250,000	Intended to be carried forward to future years
Alberta Energy - Annual Contribution	\$1,000,000	Intended for operations to March 31, 2010
Total Grants Received in 2009	\$1,250,000	
Total Expenses 2009	-\$836,590	Year-end actual
Balance End of 2009	\$991,658	
Revenue 2010 -Alberta Energy	\$850,000	For operations to March 31, 2011
Total Expenses 2010	\$928,661	Year end actual
Balance End of 2010	\$912,997	
Revenue 2011-Alberta Energy	\$850,000	For operations to March 31, 2012
Total Expenses 2011	\$983,319	Year end actual
Balance End of 2011	\$779,678	
Revenue 2012-Alberta Energy	\$850,000	For operations to March 31, 2013
Total expenses 2012	\$1,010,114	Year end actual
Balance End of 2012	\$619,564	
Revenue 2013/2014- Alberta Energy	\$1,700,000	Funding commitment to March 31, 2015
Budget expenses June 1, 2013	\$1,076,328	Forecast
Balance End of 2013	\$1,243,236	Balance forecast - March 31, 2014
Forecasted budget expense 2014	\$1,178,389	Forecast
Balance End of 2014	\$64,847	Forecast

as of September 30, 2013

Clean Air Strategic Alliance
Consolidated Core Expenses
Sept. 30, 2013

Item 1.4 - Attachment C

Expense Account	Expenditure to date	Total Budget June 2013	% of Budget
Supplies & Services			
Advertising	1,633	5,000	33
Bank and Finance Charges	1,244	2,000	62
Computers & IT	22,152	37,705	59
Courier	1,208	2,100	58
Depreciation			
Development- Stakeholders	0		
Furniture & Display	1,578	4,000	39
Office Reconfiguration	0	0	0
Honoraria - Stakeholders	27,166	61,537	44
Insurance	2,888	3,895	74
Meeting Expenses	15,899	15,860	101
Office Supplies	3,677	6,000	61
Print & Reproduction Services			
Annual Report	5,234	8,000	65
General	2,211	13,176	17
Repairs & Maintenance	363	500	73
Records Storage	2,268	2,361	96
Subscriptions	2,647	5,000	53
Telecommunications	4,932	7,309	67
Travel			
Consultants	633	625	101
Stakeholders	15,707	24,260	65
Staff	15,663	23,700	66
Total Supplies & Services	127,102	223,028	57
Professional Fees			
Legal Fees	0	3,000	0
Audit	9,500	9,500	100
Consulting Expense			
Alberta Environmental Network	14,176	21,000	68
Consulting for Board/Projects	40,176	100,000	40
Total Professional Fees	63,852	133,500	48
Human Resources			
Salaries & Wages	430,213	596,243	72
Employer Contributions	24,526	24,485	100
Group Benefits	17,238	30,541	56
Group Retirement Savings Plan	31,201	44,706	70
Performance Pay	0	0	
Employee Recognition	2,290	2,500	92
Staff Development			
Membership Fees	50	1,825	3
Training	7,818	14,000	56
Temporary Staff & Contract Labour		2,500	0
Recruitment	1,327	3,000	44
Total Human Resources	514,663	719,800	72
Total Expenses	705,617	1,076,328	66

DECISION SHEET

ITEM: **1.5 Core Budget for 2014 and Core Funding Background Information**

ISSUE: It is the responsibility of the CASA Board to approve the annual core budget. The core operating budget provides support to the CASA board and projects, administration and operating expenses, statements of opportunity, strategic planning and communications.

BACKGROUND: **2014 Core Budget:** Since its inception, CASA's budget has been directed at providing a high level of service to stakeholders and the project teams that have been so important to CASA's work. In the past year CASA has refocused its project work, to address emerging air quality issues of greatest interest to our stakeholders, with regard for a changing policy/regulatory/planning landscape in Alberta. The 2014 budget allocates funds to support the Odour Mgt. Project Team, the Electricity Framework Review, a potential Non Point Source Working Group and Project Team, several standing committees and communications initiatives identified as priorities by the Board.

Attached is a draft 2014 core budget; the total is \$1,178,389. This budget represents a net increase of 9.5% from the 2013 budget, revised in July of 2013. The whole of this increase is directed at providing stakeholder support for an increased number of project team meetings.

This draft 2014 budget is based on the following assumptions:

- CASA will be asked to convene 1 new project in 2013 (e.g. Non-Point Source Air Emissions or other SOO).
- The Secretariat will be staffed in 2014 with 6 employees and one intern or secondment. Communications services will be provided under contract for at least the first half of 2014, after which the need for a full-time communications coordinator will be reassessed. The training budget will fund the kind of enhanced training opportunities that Secretariat staff need to operate effectively in a challenging policy development environment.
- Management and non-management staff wages and salaries will continue to track increases awarded to provincial government employees and will reflect the salary grid increases negotiated with the AUPE. CASA's need to improve employee retention will be considered in any future assessment of CASA wages and benefits.

- CASA continues to benefit from the in-kind contributions of the Alberta Government, such as the office space donated by Alberta Environment and Sustainable Resource Development.

An update of the budget may be provided in 2014 to reflect the addition of any new/amended projects or initiatives.

2014 REVENUE: Alberta Energy had previously provided \$850K in core funding for 2014, received as part of an earlier grant intended to cover 2013 and 2014. The shortfall in funds (approx. 328K) for 2014 will require that CASA draw down the funds intended to cover Jan 1, 2015 to Mar. 31 2015 (bridging funds to the GoA's fiscal year end). Presently, CASA can support current projects to the end of 2014.

Supplementary support for project-specific work is provided by other organizations and individual Government of Alberta departments as and when necessary.

ATTACHMENTS: A. Draft 2014 Core Budget

DECISIONS: Approve the attached 2014 core operating budget.

	TOTAL INTERNAL January 2014	TOTAL INTERNAL - June 2013 Revision
Supplies & Services		
Advertising	5,000	5,000
Finance Charges	1,650	2,000
Information Technology	34,105	37,705
Courier	2,280	2,100
Depreciation		
Development/Training Stakeholder		
Furniture & Display	4,000	4,000
Office Reconfiguration		
Office Supplies	6,000	6,000
Insurance	4,000	3,895
Meeting - Meals	29,770	15,860
Honoraria - Stakeholder	131,875	61,537
Telecommunications	8,220	7,309
Photocopying/Printing		
Annual Report	8,500	8,000
General	16,300	13,176
Records Storage	2,597	2,361
Repairs & Maintenance	500	500
Subscriptions	7,000	5,000
Travel		
Consultants	625	625
Stakeholder	55,684	24,260
Staff	26,700	23,700
Total Supplies & Services	344,806	223,028
Professional Fees		
Accounting	-	
Audit	10,000	9,500
Legal	3,000	3,000
Consulting Other	84,500	100,000
NGO Sector	21,000	21,000
Total Professional Fees	118,500	133,500
Human Resources		
Salaries & Wages	587,589	596,243
Employer Contributions	23,104	24,485
Group Benefit Plan	34,383	30,541
Group RSP	47,007	44,706
Temporary Staff	2,500	2,500
Performance Pay	-	-
Employee Recognition	3,500	2,500
Recruitment	2,000	3,000
Staff Development		
Membership Fees	1,000	1,825
Training	14,000	14,000
Total Human Resources	715,083	719,800
TOTAL EXPENSES	1,178,389	1,076,328

DECISION SHEET

- ITEM:** 1.6 Proposed Schedule for 2014 Board Meetings
- ISSUE:** Meeting dates are set as early as possible to give members sufficient flexibility to plan their schedules.
- BACKGROUND:** In 2000, board members agreed that four meetings per year would help to keep the agenda from becoming overburdened and ensure that there was adequate time to thoroughly consider and discuss all the issues presented to the board.
- STATUS:** The CASA Executive Committee is proposing that the board continue holding four meetings per year. The June meeting would begin with a brief AGM. The proposed CASA board meeting dates for 2014 are:
- Option 1:
1. March 13 (Calgary)
 2. June 5 – Board Meeting and Special Reception (Calgary)
June 6 – CASA 20 Year Celebration Event (Calgary)
 3. September 11 (Edmonton)
 4. December 4 (Edmonton)
- Option 2:
1. March 27 (Calgary)
 2. June 5 – Board Meeting and Special Reception (Calgary)
June 6 – CASA 20 Year Celebration Event (Calgary)
 3. September 18 (Edmonton)
 4. December 11 (Edmonton)
- ATTACHMENT:**
- A. Option 1 Calendar with proposed dates highlighted for 2014
 - B. Option 2 Calendar with proposed dates highlighted for 2014
- DECISION:** Choose an option and approve the proposed meeting dates for 2014.

January 2014						
M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

February 2014						
M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

March 2014						
M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

April 2014						
M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

May 2014						
M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June 2014						
M	T	W	T	F	S	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July 2014						
M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August 2014						
M	T	W	T	F	S	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September 2014						
M	T	W	T	F	S	S
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8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October 2014						
M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November 2014						
M	T	W	T	F	S	S
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17	18	19	20	21	22	23
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December 2014						
M	T	W	T	F	S	S
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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Option 1	
CASA Board Meetings	
March 13, 2014	Calgary
June 5, 2014	Calgary (AGM)
June 6, 2014	CASA 20 th Year Anniversary
September 11, 2014	Edmonton
December 4, 2014	Edmonton
Alberta Water Council Meetings	
January 23, 2014	Executive:
March 20, 2014	Board:
May 15, 2014	Executive
June 12, 2014	Board
October 2, 2014	Executive
October 29, 2014	Board Dinner
October 30, 2014	Board
Stat Holidays	

January 2014

M	T	W	T	F	S	S
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20	21	22	23	24	25	26
27	28	29	30	31		

February 2014

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24	25	26	27	28		

March 2014

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24	25	26	27	28	29	30
31						

April 2014

M	T	W	T	F	S	S
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14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

May 2014

M	T	W	T	F	S	S
			1	2	3	4
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12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June 2014

M	T	W	T	F	S	S
						1
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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July 2014

M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August 2014

M	T	W	T	F	S	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September 2014

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October 2014

M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November 2014

M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December 2014

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Option 2

CASA Board Meetings	
March 27, 2014	Calgary
June 5, 2014	Calgary (AGM)
June 6, 2014	CASA 20 th Year Anniversary
September 18, 2014	Edmonton
December 11, 2014	Edmonton
Alberta Water Council Meetings	
January 23, 2014	Executive:
March 20, 2014	Board:
May 15, 2014	Executive
June 12, 2014	Board
October 2, 2014	Executive
October 29, 2014	Board Dinner
October 30, 2014	Board
Stat Holidays	

INFORMATION SHEET

ITEM: 2.1 Non-Point Sources Workshop Update

ISSUE: The Board will receive an update on the NPS workshop held on October 22nd in Calgary.

STATUS: At the June 2013 Board meeting, the Board reviewed a statement of opportunity for the management of non-point source air emissions (NPS) in Alberta. While the board agreed that NPS is an important issue that needs to be addressed, they did not accept the statement of opportunity at that time and directed the Secretariat to convene a workshop on NPS.

A workshop was held in Calgary on October 22, 2013 and was directed at exploring the ways in which CASA could add value to the management of NPS in Alberta. The intended outcome of the workshop was to provide advice for the Board's consideration on how to proceed.

35 participants attended the workshop that was broken into two components:

1. Presentations on NPS from a broad range of perspectives:
 - a. General overview
 - b. Government of Alberta
 - c. NGOs
 - d. Canadian Fuels Association, and
 - e. CASA
2. Interactive group work and plenary sessions using a series of targeted questions to specifically address:
 - a. Key concerns
 - b. Existing initiatives
 - c. Potential opportunities

As an outcome, a range of opportunities were identified and three of these opportunities were prioritized. In no specific order, they are:

- Understanding the NPS issue: emissions inventory, data management, and modeling
- Assessing options for action: templates and tools
- Building awareness and support

Participants discussed the three opportunities with respect to suitability for a multi-stakeholder dialogue, key barriers, and other considerations.

Following the workshop, the Secretariat produced a facilitator's summary of workshop proceedings that captures the wide range of issues related to NPS, as well as current initiatives and future opportunities. The proceedings were distributed to workshop participants, and posted on the CASA website along with copies of the workshop presentations.

The Board will have to decide next steps with respect to outcomes from the NPS workshop, including the potential timing for convening a working group to prepare terms of reference for Board approval.

ATTACHMENTS: A. Non-Point Sources Workshop Proceedings

Non-Point Source Air Emissions Workshop Proceedings



Prepared by the
CASA Secretariat

22 October 2013

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Workshop Description

A one day workshop was held in Calgary on October 22, 2013 with a multi-stakeholder group of 35 participants. The purpose of this workshop was to provide advice to the CASA Board of Directors on how to proceed regarding non-point source air emissions (NPS). The workshop objectives were:

- Develop a common understanding of non-point source air emissions.
- Discuss needs, gaps, and opportunities with respect to non-point source air emissions.
- Discuss how CASA can add value to non-point source air emission management in Alberta.

The day was broken into two components: 1. Presentations on NPS from a broad range of perspectives, and 2. Interactive group work addressing a series of targeted questions.

1. Presentations

Participants heard presentations related to NPS, including a general overview of the issue, stakeholder perspectives and initiatives, and a description of past CASA project work that preceded this workshop. Participants were also given the opportunity to ask questions.

NPS Overview #1

Presentation Highlights:

This presentation focused on air monitoring in Alberta. Broad estimates of emissions are based on a regional monitoring network that is sparsely dispersed across the province, and that does not provide granular localized information. Stations tend to be located in areas where there is industrial activity and associated funding. This may create data gaps with respect to NPS, as they are by definition often too small and numerous, too geographically dispersed, or too geographically large to be estimated or represented by a single point. The extent of street level variability in Alberta's urban areas, based on information sources such as mobile monitoring, building emissions data (and other area sources), and traffic volume, is unknown.

Discussion Highlights:

- Conditions may change in the areas where monitoring stations are sited. This means that monitoring stations can exist in locations where air quality is not currently an issue, though it may have been a "hot-spot" in the past.
- Mobile monitoring can give a snap-shot of conditions in an area, but does not necessarily show trends because the data collection window is limited.

- Cost of monitoring is an important limiting factor in establishing monitoring stations or mobile monitoring programs. Often monitoring occurs in response to specific emissions from a specific industry or facility, and may not contribute to our understanding of aggregated NPS emissions. A balance must be struck between achieving broad monitoring coverage and cost.
- An industrial non-point source approach to monitoring may not be an appropriate approach for NPS based on cost. An approach that seeks alternative ways to get information may be more appropriate. In the U.S. creative means of gathering information are being explored, such as crowd-sourcing for incidence of asthma inhaler-use to generate proxy data (for instance <http://propellerhealth.com/>).

NPS Overview #2

Presentation Highlights:

This presentation provided a general introduction on ways to describe and quantify NPS. NPS (as opposed to point sources or stacks) are commonly described as line, area, or volume sources based on geometry. Emissions relating to air quality that are associated with NPS include PM, NO_x, O₃, SO₂, CO, NH₃, and VOC, and are more difficult to quantify than stack emissions. NPS, point sources, and background contributors such as forest fires and intercontinental PM transport all contribute to air quality, and in many cases, it may be challenging to determine their respective contributions. Additionally, NPS contributes to a wide range of air quality issues that have differing spatial and temporal scales. An overview was given for each of the three main assessment tools, being the emissions inventory, ambient monitoring, and simulation modelling. A list of existing management tools was provided, based on jurisdiction. It was emphasized that given the complex nature of NPS, multiple management and mitigation approaches will be required.

Discussion Highlights:

- With respect to modelling NPS sources effectively, some emission inventory databases have been developed in the Land-Use Framework regional plans, but there is uncertainty about the accuracy and representativeness of the data. The NPS emissions databases tend to be more applicable to a regional rather than a local scale.
- Generally, emissions from small sources, like brick burners, are not fully captured by emission inventories. Mobile monitoring, such as the CASA ROVER initiative, could be used to identify emissions at specific points.
- A question was raised with respect to the availability of studies regarding the impact of emissions on health, specifically in Edmonton and Calgary. Such studies may exist, but no one in the group was aware of any.

The group had a brief discussion on whether anything had been missed in the NPS overview presentations. Participants noted that certain emission “hot-spots” are not necessarily recognized, such as high PM events resulting from agricultural activity. Participants felt that it would be useful to know what has been done already to address NPS. Presentations that followed provided an overview of relevant work related to NPS from the perspective of the Government of Alberta, non-government organizations, Canadian Fuels Association, and CASA.

Government of Alberta (GoA)

Presentation Highlights:

This presentation provided an overview of a variety of existing government initiatives that have relevance to NPS, outlined below.

With respect to Alberta’s Renewed Clean Air Strategy (CAS) and Action Plan, the presentation emphasized:

- The need for more integrated policy and planning with federal (i.e. National Air Quality Management System) and regional (i.e. Land Use Framework Regional Plans) initiatives.
- The increasing integration of monitoring, evaluation, and reporting systems.
- The role of CAS in providing strategic direction on cumulative effects management for point-source air emissions and NPS.

GoA conducted a systems mapping exercise in preparation for this workshop by. The exercise outlined:

- Major sectors that contribute to NPS, and associated emissions sources;
- Governance actors for each source;
- Levers of influence for each source;
- Regional emissions by sector and pollutant, using the Land Use Framework Planning Regions.

Initiatives of Alberta Agriculture and Rural Development were summarized, specifically with respect to odour and PM research, extension and education activities, and policies that either exist currently or are being planned.

Finally, the development of regional plans under the Land-use Framework was discussed. Regional Plans are expected to:

- Define economic, environmental, and social outcomes for a region
- Align with provincial policies related to land and environment
- Define the cumulative effects management approach for the region, to manage the impacts to air, water, land, and biodiversity.

Regional Plans represent an opportunity for place-based implementation of the broader CAS strategic goals. Stakeholder input will soon be requested on the Draft Air Quality Management Framework for the South Saskatchewan Regional Plan.

Following the initiatives overview, GoA suggested two opportunities for a potential CASA Project Team:

Opportunity 1: Identifying best tools to manage NPS emissions.

- Key tasks could include:
 - Assess, understand and prioritize non-point sources in Alberta and by region.
 - Compile a list of tools and approaches in Alberta, and other jurisdictions, to manage the priority non-point sources. This could include developing a decision matrix for selecting the best tool to achieve the desired outcome.

Opportunity 2:

2a) Creating stewards and changing behaviour.

- Key tasks could include:
 - Develop a non-point source literacy strategy to enhance understanding of non-point sources (cause and effect) and individuals' contributions (internalization to make decisions that affect change).
 - Develop an action plan for Alberta to identify specific actions for stakeholders, public, etc.
 - Implement the action plan and report on performance.

2b) Develop criteria for prioritizing NPS emissions.

- Key tasks could include:
 - Develop criteria for prioritizing NPS emissions and carry out the prioritization exercise.
 - Identify incentives to make practical changes (either in programs or initiatives).

Discussion Highlights:

- A question was asked regarding the legal force of the Alberta Land Stewardship Act specific to Regional Plans. It was explained that Regional Plans are considered regulatory instruments, which apply to GoA and local governments. Plans have 3 sections: the plan (strategic element); a commitment from GoA to implement; and regulatory details. Triggers and limits are incorporated into the regulatory details. If a trigger is reached,

there must be a management response. The type of response depends on the trigger and circumstances, but often takes the form of stakeholder engagement on the issue.

- To support continuous improvement, Regional Plans should be reviewed every 5 years and updated every 10 years in an adaptive management strategy.

Non-government organizations

Presentation Highlights:

In Alberta's three largest urban centres, two significant NPS emissions (PM and ozone) have either exceeded or reached the upper limits of the Canada-Wide Standards (CWS). Growth in Alberta's industrial activity and population will continue to increase pressure on Alberta's air quality. A number of recent developments represent an opportunity to address air quality in Alberta. For example, the Canadian Ambient Air Quality Standards (which are replacing the CWS) feature more stringent standards, and air quality limits are being included in emerging Regional Land Use Plans. Capacity for monitoring and reporting will be increasing through the work of the new Alberta Environmental Monitoring, Evaluation, and Reporting Agency and the airshed zones. Public interest in air quality is on the rise, as links to human health and environment become more evident. The presentation stressed the need for action to meet existing air quality standards, taking into account ways to cost-share, avoid redundancy, and complement existing work locally and nationally. CASA could be well suited to the task, but that any project would have to be targeted, necessary, and important.

Discussion Highlights:

No discussion.

Canadian Fuels Association

Presentation Highlights:

This presentation focussed on emissions from the on-road transportation sector. Information was shared on a number of initiatives that have been or are currently being put in place to reduce vehicle emissions. Since the early 1990's, significant work has been done by the transportation sector on this issue, and there have been consistent reductions in emissions of NO_x, VOCs, SO₂, and TPM. In some instances, it may take time for reduction initiatives to have an impact, because of a lag between changes made and the effect on emissions. Regardless, changes that have been made recently and newly announced measures will continue to effect improvements in emission levels. The presentation raised a number of points for consideration regarding potential work on NPS issues, including:

- Need for a provincially-federally coordinated approach to avoid duplication and overlap where possible. E.g. The apparent overlap between pieces of this discussion and the work of CCME Mobile Sources Working Group;

- Importance of addressing NPS through a multi-stakeholder group as a means to develop consolidated advice to policy makers; and

Discussion Highlights:

- Further explanation was requested regarding an assertion that PM emissions are falling, in light of the greater number of vehicles in use. It was clarified that as the fleet evolves, old vehicles represent a smaller portion of the total fleet, which causes an overall drop in pollution. New emissions standards are much more stringent than the old, and new vehicles pollute much less than old. Large polluters however, such as big trucks, pose a challenge because they tend to stay in use longer.
- A question was asked regarding off-road vehicles. The presenter indicated that, although he was aware of models that estimate overall emissions based on fuel consumption in a particular area, the Canadian Fuels Association has not fully researched the issue to date.

CASA Initiatives

Presentation Highlights:

This presentation provided an overview of past CASA initiatives which lead to the development of this NPS workshop. The Vehicle Emissions Implementation Design Team (VEIDT), active from 1998 to 2000, had a mandate to implement initiatives to help protect human health and the environment from vehicle emissions produced in Alberta. A list was provided of the VEIDT initiatives that had been implemented. The VEIDT was succeeded in 2000 by the Vehicle Emissions Team (VET), which renewed the previous mandate, and continued until 2007. In 2010, the CASA Board of Directors received the VET Final Report, and assessed that the two teams had made a significant contribution to the management of vehicle emissions. The Board agreed that transportation air emissions continue to exist, that the Clean Air Strategy should inform future work, and that in order to further address vehicle emissions, stakeholders would be encouraged to bring forward a Statement of Opportunity when appropriate.

As is usual practice, the CASA secretariat engaged stakeholders the following years to learn which air quality issues were of interest. The secretariat noted that conversations regarding vehicle emissions frequently evolved into broader discussions of NPS. In 2012, the Government of Alberta released the Renewed Clean Air Strategy and Action Plan; the plan contains frequent references to NPS. Vehicle emissions were seen by CASA stakeholders as one piece of the greater NPS issue. This led to the collaborative development of an NPS Statement of Opportunity, which was presented to the CASA Board of Directors in June, 2013. The Board agreed that NPS was an important issue, but it was observed that further scoping and prioritization was required prior to reconsideration of NPS by the Board. . The Board requested that a workshop be convened, with the purpose of providing advice to the Board on how to proceed regarding NPS.

Discussion Highlights:

- No discussion

2. Group Work

The second part of the workshop was designed to generate feedback on NPS by asking participants to list priority concerns, brainstorm existing initiatives, and identify potential opportunities. Participants began in small breakout groups, then came together for a plenary discussion.

Breakout Groups:

Participants were divided into four facilitated breakout groups, each of which discussed the following questions:

1. What is your most serious concern regarding NPS?
2. What NPS initiatives are you involved in/do you know about?
3. What do you believe are the most significant opportunities in Alberta to reduce NPS emissions and their impacts?

This sequence of questions allowed participants to first articulate where problems exist and how those problems are or are not currently being addressed. Having framed the issue of NPS in this way, participants were then able to consider which of the problem areas could be regarded as significant opportunities for work. Each breakout group reported the results of their discussion to the plenary session. Opportunities for addressing NPS were consolidated into one list, and then refined to remove repetition. Cross-cutting opportunities began to emerge. The final consolidated list of opportunities was posted on the wall and participants were asked to vote for those they felt were of highest priority. Detailed notes from each breakout group can be found in Appendix C.

3. Top Three Priorities to Address NPS

The voting exercise resulted in a prioritized list of opportunities, and the group was led in a plenary session to discuss the outcomes.

Top three opportunities identified, *in no particular order*, for addressing NPS are:

- Understanding the NPS issue: emissions inventory, data management, and modeling
- Assessing options for action: templates and tools
- Building awareness and support

Understanding the issue: emissions inventory, data management, and modeling

While it is clear that information exists for some NPS elements, questions remain regarding NPS on the whole. Gaining an improved understanding would be critical, not only to build a solid foundation for future work on NPS, but to help focus efforts on work that will have the most impact for resources invested.

A number of gaps exist that could be addressed. There is an opportunity to develop inventories of NPS emissions and sources, in order to understand the relative contribution of each to ambient air quality, as well as any trends that may exist. Related to this is understanding the relationship between NPS and point source emissions, and their respective contributions to ambient air quality.

The issue of confidence in information was raised, and an opportunity was identified to verify the relevance of existing information for addressing NPS issues in an Alberta context. Participants felt that commonly-referenced statistics on NPS in Alberta may not be reliable, as they are often broad averages extrapolated from data that is not representative across the province. Similarly, questions were raised regarding the validity of existing models for the management of NPS, which are often based on data from other jurisdictions.

As this work is highly technical, the assistance of individuals with specialized skills would be required. CASA could play a role as an oversight committee for coordination of this work.

Assessing options for action: templates and tools

This opportunity speaks to the need for a clear process for responding to NPS-related air quality issues. While the Renewed Clean Air Strategy and Action Plan discusses in broad strokes the importance of NPS management, and Regional Land-Use Plans are beginning to specify air emissions thresholds that will trigger a management response, there is limited guidance on what type of management response could or should be employed. The development of a process template to support air quality objectives in regional management plans would greatly increase their effectiveness by laying out tangible steps that can be taken. In addition to outlining key considerations and information needed, this template could include a list of options for action to address NPS issues, complete with a cost-benefit analysis of each. It would be important to develop this process template with particular regard for the Alberta context and actions that would generate cross-cutting impacts.

Building awareness and support

There is an opportunity to develop an understanding and appreciation for the significance of NPS issues with the public, industry, and government. With respect to the public, in order for initiatives addressing NPS to gain traction, individuals must have an understanding of how their personal choices contribute to NPS, and potential mitigation opportunities. Combined with an understanding of the impacts on the public of NPS, individuals could be encouraged to make

well-informed and responsible personal decisions, and to support targeted regulation that may result from potential project work. The concept of a public awareness campaign was introduced.

Engagement with stakeholders will need to be ongoing and bolstered by a clear articulation of the case for support, specifically with respect to the CASA process. This will facilitate further championing of the issue within industry, government, and non-government organizations.

It was noted that the top three priority opportunities are necessarily interrelated. For example, in order to build awareness of NPS, there must be a significant issue about which you are trying raise awareness, and an action to address that issue. The decision of which issues to address must be based on solid NPS data and/or models. As such, rather than being a linear process, addressing the priority opportunities is likely to be somewhat iterative in nature.

4. CASA and the Priority Opportunities

Participants were asked to consider the three identified priority opportunities in the context of a potential CASA project by answering each of the following questions:

1. Which are best suited to a multi-stakeholder dialogue, and why?
2. What are the key barriers that an NPS Project Team would have to overcome, and how would you advise them to accomplish this?
3. What else should CASA consider in moving forward with an NPS initiative?

The following is a summary of the subsequent plenary discussion.

Multi-stakeholder dialogue

A multi-stakeholder approach will be important for each of the three opportunities to address NPS air emissions. In terms of understanding the issue, data inventories, and assessing options for action, information will need to come from a wide variety of sources. CASA has a unique ability to build relationships and provide a neutral forum in which the work can be done. It was suggested that the work be divided into two parcels: one with a focus on technical work done by specialists, and one with a focus on broad oversight and direction provided by a wider range of interested stakeholders. This would ensure that reliable information is produced in a manner that is transparent and inclusive.

Key barriers

While the three identified opportunities hold the potential for progress in addressing NPS, there are also inherent challenges. A balance must be struck where the scope of work for a potential NPS project team is both realistic and valuable. Participants stressed that in order to avoid a project whose objective is overly ambitious, clear intended outcomes and overall purpose must be developed recognizing existing resource limitations. It is equally important that the focus of

project work not be governed solely by factors such as perception of importance, “pet projects” of particular groups, or areas that are the least challenging.

The highly technical nature of understanding the issue led participants to question the extent to which CASA could realistically be involved. A point was also made regarding access to data, as much of the resources and expertise required for this type of work reside with the Government of Alberta and Environment Canada. It was felt that the pursuit of a better understanding through a multi-stakeholder process is nonetheless necessary to ensure that decisions can be made with a high level of confidence in the data.

Regardless of scope, this type of work will be time and labour-intensive. Duplication of work must be avoided, and existing efforts must be supported wherever possible. Developing work to support Regional Land Use Plans was highlighted as an opportunity to leverage resources and increase efficiency.

The broad nature of NPS will challenge a team’s ability to build awareness and support. Generating ownership for such a broad issue may be difficult both with stakeholders of the CASA process and with the public. It will be essential to ensure that coordinated and focused messaging is developed concurrently with any project work. This may mean the development of different messaging for different audiences.

Other considerations

Participants were asked to provide CASA with any final considerations regarding a potential NPS initiative. The group re-emphasized the importance of learning from other jurisdictions such as the U.S., and that there is no interest in repeating existing work. Participants felt that immediate action was warranted, noting that there will never be a time when conditions are perfect and all variables are known. Lastly, the connection between health and NPS was discussed. Although health is not necessarily in and of itself an opportunity for a potential NPS project, it is the rationale for proposed work.

5. Conclusion and Next Steps

The CASA Secretariat committed to creating a proceedings document, to be shared with workshop participants. As was the original intent of the workshop, information collected will contribute to advice to the Board on how to proceed regarding NPS. In closing comments, Norm MacLeod indicated that a revised NPS Statement of Opportunity will be developed based on this workshop for consideration at the December Board meeting. The Secretariat may draw upon the experience of certain workshop participants to help frame the proceedings document and Statement of Opportunity. Norm also asked that attending Board members act as advocates and describe their experience in the NPS workshop to the Board, including the multi-stakeholder process, and resulting agreements. Norm brought the day to a close by thanking workshop

participants for attending and providing valuable information. Special thanks were given to individuals who provided presentations in the morning.

Note:

This document is a facilitators summary of workshop proceedings that characterizes the range of views expressed with respect to NPS emissions and, where warranted, any convergence of opinion.

Appendix A: Workshop Participant List

Name	Affiliation
Joannes Wong	Alberta Municipal Affairs
Kim Lalonde	Alberta Environment and Sustainable Resource Development
Martin Chamberlain	Alberta Energy
Merry Turtiak	Alberta Health
Peter Dzikowski	Alberta Transportation
Rhonda Lee Curran	Alberta Environment and Sustainable Resource Development
Lisa Sadownik	Alberta Environment and Sustainable Resource Development
Sandi Jones	Alberta Agriculture and Rural Development
Sean Royer	Alberta Agriculture and Rural Development
Martina Krieger	Alberta Environment and Sustainable Resource Development
Robin Suave	City of Calgary
Tanya Moskal-Hebert	Alberta Agriculture and Rural Development
Al Shulz	Chemistry Industry Association of Canada
Brian Ahearn	Canadian Fuels Association
Brock Helm	Alberta Sand and Gravel Association
Dan Thillman	Alberta Chamber of Resources
Koray Onder	CAPP
Rich Smith	Alberta Beef Producers
Claude Chamberland	CAPP
Cory Colbran	SWANA Northern Lights Chapter
Gilles Morel	Canadian Fuels Association
Ann Baran	Southern Alberta Group for the Environment
Bill Calder	Prairie Acid Rain Coalition
Don Wilson	Alberta Motor Transport Association
Eugene Mohareb	Pembina Institute
Leonard Standing on the road	Ponoka Fish and Game
Ruth Yanor	Mewassin Community Council
Scott Wilson	Alberta Motor Association
Mandeep Dhaliwal	Alberta Airsheds Council
Bob Scotten	Alberta Airsheds Council
Facilitation Team	
<i>Alex Grzybowski</i>	<i>Facilitator</i>
<i>Celeste Dempster</i>	<i>CASA</i>
<i>Robyn Jacobsen</i>	<i>CASA</i>
<i>Michelle Riopel</i>	<i>CASA</i>
<i>Norm MacLeod</i>	<i>CASA</i>

Appendix B: Workshop Agenda

Tuesday, October 22, 2013 Headspace (1817 10th Avenue SW, Calgary)	
8:30 am	Registration
9:00 am	Welcome, Introduction & Agenda Review <i>Alex Grzybowski, Facilitator</i> <i>Norm MacLeod, CASA Executive Director</i>
9:20 am	Panel Discussion <ul style="list-style-type: none"> • Overview of non-point source emissions • Significance of the issue in Alberta • Questions & Clarification
10:15 am	Networking Break
10:35 am	Non-Point Source Perspectives and Initiatives <ul style="list-style-type: none"> • Government of Alberta • Non-Government Organizations • Canadian Fuels Association • Clean Air Strategic Alliance • Questions & Clarification
12:00 pm	Lunch
1:00 pm	Breakout Group Discussions Four breakout groups consider the challenges they have experienced, as well as initiatives they are aware of/involved in, and identify key opportunities for a CASA initiative.
2:30 pm	Breakout Group Reports & Prioritization <ul style="list-style-type: none"> • Presentation of group highlights and plenary discussion. • Key opportunities are prioritized.
3:00 pm	Networking Break
3:20 pm	Breakout Group Discussions Four breakout groups discuss barriers and considerations for CASA moving forward with a NPS initiative.
4:20 pm	Breakout Group Reports Presentation of group highlights and plenary discussion.
4:45 pm	Next Steps and Closing <i>Alex Grzybowski, Facilitator</i> <i>Norm MacLeod, CASA Executive Director</i>
5:00 pm	Adjournment

Appendix C: Breakout Group notes

Group 1

NPS Workshop: Small Group #1 discussions

1. Identifying the Sources

Concern:

- What are the emissions?
- What are the trends?
- What problems are we trying to solve (focus)?
- Building a common understanding

Initiatives:

- We know some of the big pieces already (sources) ex. road dust
- Capital Region is doing fine PM modelling (see GoA backgrounder for details)
- CCME Mobile Sources Working Group
- Environment Canada, MOVES program (non-road modelling, includes industrial and recreational sources)
- World Bank is doing satellite monitoring

Opportunities:

- Inventory of NPS (this is also referenced in Clean Air Strategy Action Plan)
 - Improving existing inventories
 - Validating existing inventories
 - Establishing a baseline
- Trend modelling specific to all of Alberta (not just Edmonton and Calgary)
- This information can show us where we can focus our effort in order to make the biggest different
 - Knowing what the issue(s) is/are
 - Start with the big pieces
 - Need to prioritize – we know some of the big sources and could use this to do some initial prioritization
- Can we coordinate with the work being done under the Land-use Framework?
- This work feeds into other pieces, other steps flow from this information

2. Bringing Parties Together Effectively

Concern:

- To work on creative solutions

Initiatives:

- CASA NPS workshop
- Airshed zones
- Regional planning process (LUF)
- Clean Air Strategy

Opportunities:

- All of the initiatives listed above
- Engaging municipalities
- CASA
 - Provincially
 - Feeding into the federal process

3. Emissions (PM and VOCs) from Agricultural Operations

Concern:

- Health impacts associated with these emissions
 - For people, crops and animals
- Implementation of currently available tools to reduce emissions

Initiatives:

- Beneficial management practices for agricultural sector
- Various health effects studies
- Several initiatives were mentioned by AARD during the GoA presentation this morning
- PM and Ozone Management Plans (airshed zones)

Opportunities:

- PM and VOC monitoring
- Health effects studies
- Using this information to build management strategies

4. Legislation

Concern:

- Consistent application of legislation
 - Using appropriate tools to achieve the best result

- First Nation consultation process
 - Alignment between different processes
 - Agreeing on how we'll all work together

Initiatives:

- Clean Air Strategy
- AER – Peace River proceeding 1769924

Opportunities:

- Plugging into regional planning process
- Plugging into rollout of AQMS (eg. CAAQS)

5. Funding

Concern:

- To fund air quality monitoring
 - NPS helping to fund (eg. Transportation)
- Funds for any implementation costs associated with work that is chosen to be done

Initiatives:

- CRAZ and the GoA did some work around charging a fee on vehicle registration, but it ultimately didn't lead anywhere

Opportunities:

- This is probably something that should be considered later on in the process rather than at the beginning
- Could be a technological solution to funding air quality monitoring
- Polluter pays principle
 - Could look at smaller sources (eg. Paintshops) to fund monitoring (eg. Part of licensing fee)
- Funding could be one tool to solve issue of how to support air quality monitoring

6. Awareness

Concern:

- About the issue of NPS, resources that are available to do work
- Bringing people in
- Understanding the effects of NPS

- Helping individuals understand their contribution including cumulative daily activity
- How individuals can make changes

Initiatives:

- Capital region modelling on non-road
- CRAZ has a Community Based Social Marketing Project
- WHO
- Clean Air Strategy Action Plan

Opportunities:

- Air literacy and education strategy
- Leverage work currently being done on energy literacy
- Leverage local sustainable communities work
- Providing technical support to municipalities
- Promoting CASA and CASA's work
 - Leverage airshed zone outreach work
- Incentives for students
 - Challenge them to study air quality issues

7. Jurisdiction:

Concern:

- Where can we make a difference?
 - Work to undertake should be practical
 - Should consider cause and effect – where we can get the most for our sweat equity
- No duplication of work
- Solutions need to work for Alberta

Initiatives:

- None

Opportunities:

- This is really about finding a scope where we can do good work
- This concern is a prioritization tool for focusing scope
- It is more of a process concern/consideration

Group #1 also had some thoughts about NPS initiatives in general:

- What's happening in other provinces?

- Ex. Ontario
- What happening outside of Canada?
 - USA? Europe?

General Discussion:

After working through the three questions, the group was asked which opportunities rose to the top. Group 1 identified that, in terms of sequencing, #1 (Identifying the sources) and #2 (Bringing parties together effectively) are first pieces - #1 creates an information base and helps to prioritize and focus action while #2 creates the condition for a successful process to achieve outcomes.

Group 2

1. Ammonia

Concern:

- The group did not articulate specific reasoning or explanation of this concern.

Initiatives:

- AAAQO is assessing ammonia for setting objectives
- Alberta Agriculture has initiatives to address ammonia

Opportunities:

- No opportunities were identified

2. Total Particulate Matter

Concern:

- The group did not articulate specific reasoning or explanation of this concern.

Initiatives:

- The Capital Regional Air Management Framework provides advice to Alberta Environment regarding TPM

Opportunities:

- No opportunities were identified

3. Lack of good emissions data

Concern:

- Lack of inventory of emissions
- Lack of evidence base to guide efforts
- Lack of confidence in existing models:
 - Potentially based on data that isn't transferrable to Alberta
 - Estimates are extrapolations of few localized monitoring sites to broad-scale averages.

Initiatives:

- Alberta Environmental Monitoring and Evaluation Agency has made large investments in monitoring capacity.

Opportunities:

- Develop an evidence-based inventory of NPS
- Develop confidence in NPS estimates and modeling.
 - Relevance to Alberta
 - Assumptions underlying data averages

4. Understanding the relative contribution of sources

Concern:

- We don't currently have a good understanding of the full list of contributors to NPS, the relative significance of each, or the interactions among them.
- NPS and Point Source air emissions act together to impact ambient air quality. The relationship between these isn't well-understood.

Initiatives:

- Subsets of data exist for many individual contributors of NPS
- Alberta Environmental monitoring and Evaluation Agency has ambient information. The group was unclear whether the Agency has localized emissions inventories.

Opportunities:

- Explore completeness of total list of NPS Contributors
- Explore issue of combined/cumulative effects of contributors to NPS on ambient air quality.
- Explore significance of NPS on ambient air quality, relative to Point Source.

5. The solution that is developed doesn't fit the problem

Concern:

- If the solution isn't designed to fit a known problem, there is potential for undue burden or negative effect on impacted stakeholders,
- Solution cannot focus on only known, easily understood sources (ie. low-hanging fruit), with abundant data just because it's easier. It must consider that source of the problem may be poorly understood (such as cumulative impact of multiple sources), but no less significant to ambient air quality.

Group 3

1. Templates, tools, methods
2. Adapt models
3. PM Fines
4. Solutions-focused work
 - a. Hotspots
 - b. Triggers/targets management response
 - c. Clean energy
 - d. Carbon Footprint
5. Identify significant unregulated sources

Group 4

A. Data and information management

What it means: Coordination within the province and across jurisdictions.

Related issues:

1. Provincial requirements for the in-use fleet don't match other Canadian jurisdictions
 - Includes light duty, heavy duty, on-road, off-road, etc.
 - E.g. Federal anti-tampering legislation not implemented in Alberta; out-of-province inspections.
 - There has been some past Government of Alberta work, but there doesn't seem to be anything happening currently.
 - The federal Mobile Sources Working Group may address this issue, but the group is still in the formative stage.
2. Lack of data and/or coordination of existing sources of information.
 - CEMA has developed an emissions inventory for Wood Buffalo.
 - The Acid Deposition Framework developed an emissions inventory.
 - Alberta Agriculture has an emissions inventory.
3. Reducing emissions from light-duty vehicles.
 - Reducing fuel use; informing consumers of money-saving opportunities; building awareness.
4. Cumulative effects and thresholds in Land Use Framework.

- Need to know how thresholds in regional plans under the Land Use Framework will effect new development? Could result in stranded resources.

Potential Actions

1. Vehicle inspection and maintenance program
 - Could be mandated inspections, voluntary program, or incentivized program.
2. Public awareness-to-action program to drive the development of appropriate government policy.
3. Technology – could we develop an app?
4. Beneficial Management Practices that target large fleets.

B. Assessing options for action

What it means: Develop a list of potential actions for managing NPS emissions. Analyze potential actions to identify 1) cross-cutting actions that would be applicable in regions across Alberta; 2) actions that would have the most impact for the least effort (best bang for the buck).

Related issues:

1. Lack of data – need to know what portion of emissions is coming from non-point sources. This is directly linked to developing an emissions inventory and data/information management.
2. Regions that have exceeded the PM/O triggers are developing individual action plans, but there could be the opportunity for coordinated actions.
 - The Capital Region Airshed Zone is developing an action plan.
 - Regional plans under the Land Use Framework have regional air quality plans.
 - The Clean Air Strategy has an action plan.
 - Airsheds and municipalities have many on-going initiatives.
3. Need better management of urban NPS.
 - Urban centers have the highest levels of pollution and also the highest density of potentially affected people.
 - There are many data gaps related to priority emissions and sources of NPS emissions.
4. Cumulative Effects – how will thresholds in regional plans under the Land Use Framework effect new development? Could result in stranded resources.

Potential Actions

1. Develop a list of actions that could apply across regions.
2. Cost/benefit analysis of actions.
3. Short list of the “best” actions.
4. Tool box or a guide for regions that is Alberta-specific.
5. Better data management and/or emissions inventory.
6. Better coordination across regions and initiatives.
7. Public awareness of which *individual* actions could have the most impact for the least effort.

C. Public awareness

What it means: Building support for individual action and government action. Envisioning a role for CASA.

Related issues:

1. Ensuring responsible and informed personal/individual decision-making.
 - Helping people to make connections between NPS and their own individual decisions.
 - Ensuring people take personal responsibility for their contribution to NPS.
 - Developing tools to help people make informed decisions.
 - Understanding the role of government.
 - Reducing emissions from light-duty vehicles.
 - Reducing fuel use; informing consumers of money-saving opportunities; building awareness.
 - There are already many initiatives (car-pooling, TDM, transit, cycle lanes, urban densification, etc.) but a lack of coordination.
 - Many airsheds have some public awareness initiatives.
 - The Capital Region Airshed Zone releases public information – Annual Assessment of Air Quality and 2014 reporting against CAAQS.
 - The AQHI is an outreach program.
 - The federal government has public education programs, e.g. responsible fuel consumption.
 - There are many initiatives at the municipal level.
 - Alberta Agriculture has an extension program.
2. Building support and awareness of government decisions
 - Building acceptance/buy-in from the public for tough government decisions regarding regulation and policy developments.
 - Related to all levels of government.

Potential Actions

1. A stronger role for CASA in education.
2. Strategies for make NPS meaningful . . . “sexy”.
3. Getting people to think differently about their role in NPS.
 - A multi-stakeholder forum, such as CASA, means better buy-in across the range of interests.
4. Awareness of the individual impact on NPS emissions – how they contribute, how they can have the most impact.
5. Better provincial coordination of on-going public awareness initiatives (led by airsheds, municipalities, etc).
6. Government should take the lead.
7. Better data to develop a base line against which to measure progress.
8. Awareness of which individual actions could have the most impact for the least effort.

D. Emissions Inventory

1. Links to Public awareness:
 - Better data to develop a base line against which to measure progress.
2. Links to Assessing options for action:
 - Lack of data – need to know what portion of emissions is coming from non-point sources.
 - Need to be able to identify priority emissions and priority sources.
3. Need to know how thresholds in regional plans under the Land Use Framework will effect new development? Could result in stranded resources.

DECISION SHEET

ITEM: 3.1 Human and Animal Health Team Final Report

ISSUE: Review and discuss the Human and Animal Health Final Report, associated recommendation and advice to CASA.

BACKGROUND: In 1995, CASA's Human Health Resource Group was formed to advise the Board on strategic direction for addressing human health/air issues. In 1997, the group developed a broad framework for a human health monitoring system.

In 1998, the Human Health Project Team (HHPT) was established to develop an implementation plan for the 1997 framework. The team recommended that a sub-group be formed to undertake this task.

In 1999, the HHPT subgroup produced an implementation plan with 13 recommendations. Taken as a whole, these recommendations constituted a vision for a Comprehensive Human Health Monitoring System (CHHMS) that could be used to gather information on the health of people for the purpose of detecting issues, trends and associations between air quality and health related variables. The process was anticipated to consist of an on-going systematic collection, analysis and interpretation of selected data on health outcomes, air quality parameters and population exposure. Also in 1999, a separate CASA project team named the Animal Health Project Team (AHPT) was formed with the goal of preventing short and long-term adverse impacts of air contaminants of animal health. Between 1999 and 2003, both the HHPT and the AHPT worked to successfully implement a number of their recommendations.

In 2003, the AHPT presented their final report and six recommendations to the CASA Board. The Board accepted a recommendation to establish the Human and Animal Health Team (HAHT). The HAHT was tasked with implementation of the outstanding recommendations from the HHPT's 1999 human health framework implementation plan, and the 2003 Animal Health Project Team Final Report.

In 2007, HAHT presented a final report to the CASA Board of Directors. The report recommended that the team be disbanded, although not all outstanding recommendations were complete, primarily with respect to implementation of CHHMS. The government caucus asked for more time to determine if there were other options for implementing CHHMS, and the Board chose not to disband the team.

In 2008, the HAHT received a presentation from Alberta Health regarding a pilot project called the Alberta Real Time Syndromic Surveillance Network (ARTSSN). The team agreed that ARTSSN could be a means of implementing CHHMS and recommended this to the Board, withdrawing

the 2007 recommendation to disband the team. The team also recommended that Alberta Health provide a report on implementation of ARTSSN at a future Board meeting.

At the December 2011 CASA Board meeting, Alberta Health presented on implementation of ARTSSN, and the Board decided that ARTSSN did not fulfill the intent of CHHMS as was originally expected. This led the HAHT to reconvene throughout 2012 to review the original intent of CHHMS, and to discuss how to proceed. The team determined that in order to assess whether the goals of CHHMS were being accomplished, an “inventory of parts” was needed of the inputs to the CHHMS, including the agencies that contribute to the CHHMS, and how they currently link/coordinate with each other.

STATUS:

The inventory was completed in early 2013, and the HAHT met again to review the following:

- Goals of CHHMS
- Inventory
- Ongoing work that directly or indirectly supports the goals of CHHMS
- Incomplete recommendations

The team discussed what, if any, would be the appropriate role for CASA in ongoing work. The team agreed by consensus to disband the HAHT.

In addition to the recommendation that the HAHT be disbanded, the Team felt it warranted to provide the following advice to the Board:

- Any updates on on-going initiatives to the CASA Board (from industry, government, or NGOs) should include a specific focus on health considerations and linkages to other initiatives. If possible, presenters should address how their initiative supports the implementation of the CHHMS goals.
- Industry, government, and NGOs should make presentations to the Board on any new initiatives focused on health considerations.
- To ensure that animal health concerns are included in CASA work, project managers should ensure that existing and new teams have an explicit discussion on how to include animal health concerns in their work

The attached report contains the rationale for disbandment, outlining the current status of previously incomplete recommendations, as well as advice to the Board on next steps.

ATTACHMENTS:

- A. Human and Animal Health 2013 Final Report

DECISIONS:

1. Approve the 2013 Final Report from the Human and Animal Health Team.
2. Accept the recommendation to disband the team.
3. Accept the advice from the team and direct the secretariat to proceed with implementation.

Human and Animal Health Team

Final Report

Prepared by the CASA Secretariat

Presented to the CASA Board of Directors

December 2013

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Background

Note: A number of reports have been produced throughout the history of the Human and Animal Health Team. For a timeline of reports and their associated authors, refer to Appendix A.

CASA’s Human Health Resource Group was formed to advise the Board on strategic direction for addressing human health/air issues. In 1997, the group developed a broad framework for a human health monitoring system with the following goals:

- To ensure the availability of timely, high quality data while respecting issues of privacy and confidentiality;
- To ensure that information about human health relative to air quality is made available to the public and decisions-makers; and
- To encourage studies and pilot projects on human health, especially lung health, and to correlate results with ambient air quality data and other relevant data.

The Human Health Project Team (HHPT) was established in 1998 to develop an implementation plan for the 1997 framework. At the November 1998 Board meeting, the Board approved the recommendations from the HHPT, including the formation of a subgroup to develop specific recommendations for implementation of the 1997 framework.

In 1999, the HHPT subgroup produced an implementation plan with 13 recommendations. Taken as a whole, these recommendations constituted a vision for a Comprehensive Human Health Monitoring System (CHHMS) that could be used to gather information on the health of people for the purpose of detecting issues, trends and associations between air quality and health related variables. The process was anticipated to consist of an on-going systematic collection, analysis and interpretation of selected data on health outcomes, air quality parameters and population exposure. Also in 1999, a separate CASA project team named the Animal Health Project Team (AHPT) was formed with the goal of preventing short and long-

term adverse impacts of air contaminants on animal health. Between 1999 and 2003, both the HHPT and the AHPT worked to successfully implement a number of their recommendations.

The AHPT presented their final report and six recommendations to the CASA Board at the March 2003 Board meeting. The AHPT recommendations were accepted by the board, including a recommendation for the establishment of the Human and Animal Health Team (HAHT). The Board agreed to the formation of HAHT, which was tasked with implementation of the outstanding recommendations from the HHPT's 1999 human health framework implementation plan, and the 2003 Animal Health Project Team Final Report.

In 2007, HAHT presented a final report to the CASA Board of Directors. The report recommended that the team be disbanded, although not all outstanding recommendations were complete, primarily with respect to implementation of CHHMS. The government caucus asked for more time to determine if there were other options for implementing CHHMS, and the Board chose not to disband the team.

In 2008, the HAHT received a presentation from Alberta Health regarding a pilot project called the Alberta Real Time Syndromic Surveillance Network (ARTSSN). The team agreed that ARTSSN could be a means of implementing CHHMS and recommended this to the Board, withdrawing the 2007 recommendation to disband the team. The team also recommended that Alberta Health provide a report on implementation of ARTSSN at a future Board meeting.

At the December 2011 CASA Board meeting, Alberta Health presented on implementation of ARTSSN, and the Board decided that ARTSSN did not fulfill the intent of CHHMS as was originally expected. This led the HAHT to reconvene throughout 2012 to review the original intent of CHHMS, and to discuss how to proceed. The team determined that in order to assess whether the goals of CHHMS were being accomplished, an "inventory of parts" was needed of the inputs to the CHHMS, the agencies that contribute to the CHHMS, and how they currently link/coordinate with each other.

The inventory was completed in early 2013, and the HAHT met again to review the following:

- Goals of CHHMS
- Inventory
- Ongoing work that directly or indirectly supports the goals of CHHMS
- Incomplete recommendations

The team discussed what, if any, would be the appropriate role for CASA in ongoing work. The team agreed by consensus that the 2007 recommendation to disband HAHT should be forwarded to the CASA Board for a final decision. The following section of this report contains the rationale for disbandment, outlining the current status of previously incomplete recommendations, as well as advice to the Board on next steps.

Outstanding Recommendations

Prior to the 2013 deliberations of HAHT, there were 13 recommendations with incomplete statuses from previous reports. The team assessed each recommendation, and agreed on a current status for each, summarized in Tables 1a and 1b below. A detailed account of the team's assessment of each individual recommendation can be found in Appendix B.

Recognizing that the five outstanding recommendations from the 1999 Human Health Monitoring Framework (Table 1a) dealt with implementation of CHHMS, the team chose to consider them as a group as well as individually. Details on current activities and initiatives relating to each of the five outstanding recommendations are shown in Appendix B. It is the view of the Human and Animal Health Team that the recommendations are complete, as they are no longer relevant. The rationale for this determination is:

- Since 1999, there has been a significant change in the manner Alberta Health, the Government of Alberta and its associated agencies identify and respond to issues related to air quality and health.
- While Government of Alberta and agencies have individual mandates, there is a shared responsibility between all parties to address and collaborate on activities or initiatives related to human health concerns and air quality from a variety of sources.
- The work of the HAHT to build an inventory of activities to identify CHHMS inputs not only demonstrates that collaboration between agencies is occurring but that air quality and health is being assessed and is part of routine government processes, responses and activities with other stakeholders like industry, the public and multi-stakeholder organizations like CASA.
- Additionally, larger government driven initiatives or strategies like Integrated Resource Management System (IRMS), Alberta Environmental Monitoring Reporting Agency (AEMRA), Land Use Framework and the Renewed Clean Air Strategy include a recognized importance to protect Albertans from poor air quality. This concept is interconnected and embedded into all streams of policy development, implementation, evaluation and management.
- To have this connection more clearly identified, the HAHT will be providing advice to the CASA Board that presentations about strategies or initiatives from any stakeholder, but particularly the Government of Alberta, must work to describe and identify the linkage of the work to human health protection and air quality.
- There has also been significant increase in the accessibility and availability of data to the general public and stakeholders, particularly non-government organizations and researchers. The data that is available includes air quality sampling, data translation and knowledge, and health outcomes through continued or new initiatives like the GoA Open Data Portal, CASA Data Warehouse, Air Quality Health Index and the Integrated Health Data Application. The process of monitoring and managing data and reviewing possible links

between emissions and human health is an evolving process that will continue to improve over time. New elements are being added as they become available and emphasis on this work continues to improve accessibility to the general public.

- Finally, the table that follows provides a high level demonstration of how each of the recommendations are being implemented although not within the proposed CHHMS model/system. This listing contains examples of current activities with more being identified within the HAHT inventory.
- For each recommendation, it should be noted that one input is proceedings and hearings, which are all public information.

Table 1a: Outstanding Recommendations

Ref. #	Recommendations	Status
	Human Health Project Team – Human Health Monitoring Framework (May 1999)	
1	Ongoing Activity: AHW to establish a system to manage and monitor the established data base with its six components on an ongoing basis as described in the CHHMS. The data base is reviewed on an ongoing basis to provide an early warning of health effects due to emissions, or links between emissions and human health symptoms or effects, and determine the health status of the population. This will require the cooperation of AENV, RHAs and CASA.	Complete. No longer relevant.
2	Issues/Actions Identification: AHW to establish a formal process to review human health issues identified through Ongoing Activity under 23 above as described in the CHHMS. A scientific advisory committee (SAC) will be needed to provide scientific oversight on this and subsequent steps.	Complete. No longer relevant.
3	Investigation: AHW, with the assistance of AAENV, EUB and RHAs to undertake Investigations identified in 24 above, as described in the CHHMS. Oversight to be provided by SAC.	Complete. No longer relevant.
4	Multi-stakeholder Management: AHW in partnership with CASA to establish a multi-stakeholder management group that will function as an Operations Steering Committee as described in the CHHMS. This is distinct from the data management required to operate the system.	Complete. No longer relevant.
5	Feedback: New information will continuously feedback into on-going activity. AHW should coordinate feedback as part of the CHHMS.	Complete. No longer relevant.

The HAHT then considered the remaining outstanding recommendations and agreed on a status for each. A summary of the outcomes of this conversation are represented in Table 1b and details can be found in Appendix B. It should be noted that Recommendations 12 and 13 did not originate from the HAHT. Rather the Performance Measures Committee forwarded these recommendations to the HAHT with permission from the Board, asking for the team's advice. This decision was based on the perspective that, of existing teams, HAHT would be best equipped to provide advice on how to proceed.

Table 1b: Outstanding Recommendations

Ref. #	Recommendations	Status
Animal Health Project Team – Final Report and Recommendations (March 2003)		
6	Recommendation 2: The AHPT recommends that the proposed complaints/response line, which is part of the approved Human Health Monitoring System, be expanded to enable documentation of and response to animal health complaints related to air pollution.	Incomplete. Forward to Performance Measures Committee.
Human and Animal Health Project Team – Final Report to CASA Board (August 2007)		
7	Recommendation 1 (consensus): The Human and Animal Health Team recommends that the CASA Board of Directors disband the team.	The team advises that the Board “revive” and accept this recommendation and disband the team.
8	Recommendation 2 (non-consensus): Alberta Health and Wellness, working with Alberta Energy and Utilities Board, Alberta Environment and the Regional Health Authorities implement the Environmental Health Hotline of the Comprehensive Human Health Monitoring System.	Complete. No longer relevant.
9	Recommendation 3 (non-consensus): Alberta Health and Wellness, working with other regulators, non-governmental organizations and industry, establish a multi-stakeholder advisory committee to the Comprehensive Human Health Monitoring System.	Complete. No longer relevant.
CASA Board Meeting (March 2008)		
10	Recommendation 1: The Syndromic Surveillance Network as a means of implementing the Comprehensive Human Health Monitoring System. Therefore, the team withdraws the Non-Consensus Recommendation 1 on the 1-800 number and the Consensus Recommendation 1 to disband the team.	Complete.
11	Recommendation 2: The team recommends that Alberta Health and Wellness report to the CASA Board on the implementation of the Syndromic Surveillance Network for the purpose of enhanced environmental health surveillance by June 2009.	Complete.
Low-Rated Recommendations sent to HAHT by the Performance Measures Committee (2012)		
12	From the Flaring and Venting Team (1998): The Energy and Utilities Board, Alberta Environmental Protection, Alberta Health and Alberta Agriculture, Food and Rural Development establish processes and linkages to relate data on oil and gas wells, and solution gas flaring and venting with data on pollutants, environmental receptors, and human and animal health.	Complete. No longer relevant.
13	From the Data Issues Group (2003): Approve and implement the human health monitoring framework (tool for detecting trends and associations between air quality and health-related variables).	Complete. No longer relevant.

Recommendation to the Board

The team agreed by consensus to “revive” Recommendation 1 from the 2007 HAHT report. This recommendation states:

The Human and Animal Health Team recommends that the CASA Board of Directors disband the team.

Advice to the Board

In addition to the recommendation that the HAHT be disbanded, the Team felt it warranted to provide the following advice to the Board:

- Any updates on on-going initiatives to the CASA Board (from industry, government, or NGOs) should include a specific focus on health considerations and linkages to other initiatives. If possible, presenters should address how their initiative supports the implementation of the CHHMS goals.
- Industry, government, and NGOs should make presentations to the Board on any new initiatives focused on health considerations.
- To ensure that animal health concerns are included in CASA work, project managers should ensure that existing and new teams have an explicit discussion on how to include animal health concerns in their work.

Appendix A: Timeline of Reports

Year	Report Title	Author
1997	Executive Framework for a Human Health Monitoring System	Human Health Resource Group
1998	Human Health Project Team Final Report to the CASA Board of Directors	Human Health Project Team
1999	Human Health Monitoring Framework Implementation Plan	Human Health
2003	Animal Health Project Team Final Report and Recommendations	Animal Health
2007	Human and Animal Health Team Final Report to the CASA Board	Human and Animal Health
2013	Human and Animal Health Team 2013 Final Report	Human and Animal Health

Appendix B: Assessment of Recommendations

Ref. #	Recommendation	Status
Human Health Project Team – Human Health Monitoring Framework (May 1999)		
1	<p>Ongoing Activity: AHW to establish a system to manage and monitor the established data base with its six components on an ongoing basis as described in the CHHMS. The data base is reviewed on an ongoing basis to provide an early warning of health effects due to emissions, or links between emissions and human health symptoms or effects, and determine the health status of the population. This will require the cooperation of AENV, RHAs and CASA.</p>	<p>Not applicable.</p> <p>Please see the inventory developed by the HAHT for a comprehensive list of inputs. Some examples include:</p> <ul style="list-style-type: none"> • Alberta Real Time Syndromic Surveillance Network (ARTSSN) by Alberta Health • Interactive Health Data Application by Alberta Health • Air Quality Health Index and advisory system by Alberta Health and Environment and Sustainable Resource Development.
2	<p>Issues/Actions Identification: AHW to establish a formal process to review human health issues identified through Ongoing Activity under 23 above as described in the CHHMS. A scientific advisory committee (SAC) will be needed to provide scientific oversight on this and subsequent steps.</p>	<p>Not applicable.</p> <ul style="list-style-type: none"> • Various ministries and agencies use scientific advisory committees or similar style groups/advice when reviewing data or developing policy and projects from the on-going activities or when investigating into specific concerns, • This includes Joint Oil Sands Monitoring, AEMRA and Land use Planning, and Alberta Energy Regulator Proceedings.
3	<p>Investigation: AHW, with the assistance of AAENV, EUB and RHAs to undertake Investigations identified in 24 above, as described in the CHHMS. Oversight to be provided by SAC.</p>	<p>Not applicable.</p> <ul style="list-style-type: none"> • This is routine business and occurs regularly. Examples include responding the oil and gas concerns under the Petroleum Industry Incident Response Plan, Alberta Energy Regulator Proceedings and Community Exposure Health Effects Assessment Programs. • When investigating any incident the use of a scientific advisory committees or similar style advice is done

Ref. #	Recommendation	Status
		<p>dependent on the needs of the situation and at the discretion of federal, provincial, and/or municipal governments and involved agencies.</p> <ul style="list-style-type: none"> GoA and its agencies routinely engage with the necessary stakeholders when conducting investigations (e.g. municipalities, watersheds, airsheds). Investigations could be triggered by an incident or by general complaints.
4	<p>Multi-stakeholder Management: AHW in partnership with CASA to establish a multi-stakeholder management group that will function as an Operations Steering Committee as described in the CHHMS. This is distinct from the data management required to operate the system.</p>	<p>Not applicable.</p> <ul style="list-style-type: none"> Larger government initiatives as those described previously, use a variety of multi-stakeholder management groups to implement or inform part of the work. CASA specific initiatives include odour management, electricity and non-point sources which all have linkages back to larger government initiatives or strategies.
5	<p>Feedback: New information will continuously feedback into on-going activity. AHW should coordinate feedback as part of the CHHMS.</p>	<p>Not applicable.</p> <ul style="list-style-type: none"> With enhanced collaboration and multi-ministry and agency initiatives, a feedback loop is created to incorporate new information as it becomes available from on-going activities.
	<p>Animal Health Project Team – Final Report and Recommendations (March 2003)</p>	
6	<p>Recommendation 2 The AHPT recommends that the proposed complaints/response line, which is part of the approved Human Health Monitoring System, be expanded to enable documentation of and response to animal health complaints related to air pollution.</p>	<p>Incomplete. Forward to Performance Measures Committee (PMC), as per the protocol for low-rated recommendations.</p> <p>The HAHT advises that the PMC forward this recommendation to the Board to determine if further work is required.</p> <p>The team feels that they can not make a determination about this recommendation as current team membership includes</p>

Ref. #	Recommendation	Status
		<p>only one animal health representative, Alberta Agriculture and Rural Development. Since the full range of animal health interests are not represented the team can not make a decision about this recommendation.</p> <p>This recommendation was developed on basis that the Comprehensive Human Health Monitoring System (CHHMS) would be implemented. The CHHMS has not been implemented as originally imagined, making it difficult to integrate animal health into the system. However, the team has concerns that deeming this recommendation “not applicable” could result in animal health concerns being overlooked in the future.</p>
	Human and Animal Health Project Team – Final Report to CASA Board (August 2007)	
7	<p>Recommendation 1 (consensus) The Human and Animal Health Team recommends that the CASA Board of Directors disband the team.</p>	The team advises that the Board “revive” and accept this recommendation and disband the team.
8	<p>Recommendation 2 (non-consensus) Alberta Health and Wellness, working with Alberta Energy and Utilities Board, Alberta Environment and the Regional Health Authorities implement the Environmental Health Hotline of the Comprehensive Human Health Monitoring System.</p>	<p>Not applicable.</p> <p>At the March 2008 Board meeting, there was consensus to remove this recommendation.</p>
9	<p>Recommendation 3 (non-consensus) Alberta Health and Wellness, working with other regulators, non-governmental organizations and industry, establish a multi-stakeholder advisory committee to the Comprehensive Human Health Monitoring System.</p>	<p>Not applicable.</p> <ul style="list-style-type: none"> • Larger government initiatives as those described above, use a variety of multi-stakeholder management groups to implement or inform part of the work. • CASA specific initiatives include odour management, electricity and non-point sources which all have linkages

Ref. #	Recommendation	Status
		back to larger government initiatives or strategies.
	CASA Board Meeting (March 2008)	
10	<p>Recommendation 1 The Syndromic Surveillance Network seen as a means of implementing the Comprehensive Human Health Monitoring System. Therefore, the team withdraws the Non-Consensus Recommendation 1 on the 1-800 number and the Consensus Recommendation 1 to disband the team.</p>	<p>Complete.</p> <p>Alberta Health implemented the Alberta Real Time Syndromic Surveillance Network (ARTSSN).</p>
11	<p>Recommendation 2 The team recommends that Alberta Health and Wellness report to the CASA Board on the implementation of the Syndromic Surveillance Network for the purpose of enhanced environmental health surveillance by June 2009.</p>	<p>Complete.</p> <p>In December 2011, Alberta Health presented to the Board on the implementation of ARTSSN and the Board decided that ARTSSN did not fulfill the intent of CHHMS as was originally expected.</p>
	Low-Rated Recommendations sent to HAHT by the Performance Measures Committee (2012)	
12	<p>From the Flaring and Venting Team (1998) The Energy and Utilities Board, Alberta Environmental Protection, Alberta Health and Alberta Agriculture, Food and Rural Development establish processes and linkages to relate data on oil and gas wells, and solution gas flaring and venting with data on pollutants, environmental receptors, and human and animal health.</p>	<p>Complete.</p> <p>Since the recommendation was made 15 years ago, it seems redundant, as the context and the tools available have significantly changed. However, the processes and linkages described in the recommendation are realized through larger government driven initiatives or strategies like the Integrated Resource Management System (IRMS), Alberta Environmental Monitoring Reporting Agency (AEMRA), and the Open Data Portal. In addition, the Interactive Health App is able to load data by disease and geographic location. This concept of demonstrating linkages between exposure and health effects is a continually evolving initiative and is being integrated into all streams of policy development, implementation, evaluation</p>

Ref. #	Recommendation	Status
		<p>and management.</p> <p>The HAHT recognizes that, as they did under #6, they do not have the appropriate representation to make a determination about animal health. The team advises that project managers consider how to incorporate concerns about animal health into existing and future teams.</p>
13	<p>From the Data Issues Group (2003) Approve and implement the human health monitoring framework (tool for detecting trends and associations between air quality and health-related variables).</p>	<p>Complete.</p> <p>Since the recommendation was made 10 years ago, it seems redundant, as the context and the tools available have significantly changed. However, the tools for detecting trends and associations described in the recommendation are realized through larger government driven initiatives or strategies like the Integrated Resource Management System (IRMS), Alberta Environmental Monitoring Reporting Agency (AEMRA), and the Open Data Portal. This concept of demonstrating trends and associations between air quality and health-related variables is a continually evolving initiative and is being integrated into all streams of policy development, implementation, evaluation and management.</p>

Status Report

Project: 3.2 **CASA and AAC Joint Standing Committee (JSC)**

Task: To provide an update on the CASA and AAC Joint Standing Committee.

Background: The JSC was struck to implement the recommendations made by the Airshed Zones Board Committee as well as to strengthen the relationship between the Alberta Airsheds Council (AAC), the airshed zones and CASA.

In 2012, the JSC prioritized key task 3* as its focus for work and contracted two consultants to write a discussion paper to inform the Committee's deliberations about roles, responsibilities and relationships regarding Alberta's AQMS. The discussion paper provides information about:

- functional components of Alberta's Air Quality Management System,
- roles and responsibilities of the organizations delivering aspects of the system;
- relationships among organizations;
- government initiatives related to the delivery of air quality management; and
- strengths, issues or inconsistencies that the Committee may wish to address.

*Key task 3 - Identify, discuss and make recommendations related to:

- policies and strategies that could potentially affect CASA and AAC and its members,
- overall policy pressures resulting from government initiatives, and pressures coming from stakeholders or the public with respect to air quality management, and
- further clarification of the roles, interests and relationship between AAC, airshed zones and CASA.

Status: On March 6th 2013, the JSC met with Ernie Hui, CEO of the Alberta Environmental Monitoring, Evaluation and Reporting Agency, as well as representatives from ESRD to review the discussion paper and discuss ways in which the JSC could contribute to evolving monitoring initiatives. Following this meeting, the JSC prepared a letter to Alberta Environmental Monitoring, Evaluation and Reporting Agency requesting that the agency:

1. Meet regularly with the JSC as their work continues; and



2. Provide feedback about how the JSC could most effectively provide input to the agency's ongoing work.

The JSC received a response to the letter on July 10, 2013 which proposed a follow-up meeting in late fall 2013 or early 2014 "to provide an update on progress towards the creation of the arms-length agency and an enhanced provincial environmental monitoring system".

The timing of this next meeting is subject to roll-out of the agency and the availability of sufficient information to warrant JSC feedback.

Attachments:

- A. Letter received by the JSC from Ernie Hui, CEO Alberta Environmental Monitoring, Evaluation and Reporting Agency.



Environment and Sustainable
Resource Development

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AR 54342

July 10, 2013

CASA and Alberta Airshed Council Joint Standing Committee
c/o Clean Air Strategic Alliance
10035 – 108 Street, FLR 10
Edmonton, Alberta
T5J 3E1

Dear Members of the Standing Committee:

Thank you for your letter of April 29, 2013, which followed on our earlier discussion on the environmental monitoring system for the province, and the creation of an arms-length agency to lead the system. I appreciate the time and the effort from CASA and the airshed associations in articulating your collective thoughts and suggestions to me.

Since meeting with the Joint Standing Committee, I have met on an individual basis with many of the airshed associations at their respective annual meetings. In those discussions, each airshed association highlighted the issues raised in your April 29, 2013 letter - providing opportunity to engage in constructive dialogue at the local level with the arms-length agency; continuing to recognize and enable the valuable role that airshed associations play; and providing sustainable funding into the associations.

I indicated to airshed associations that the success of transitioning to an enhanced environmental monitoring system requires a strong involvement from the local community. Airshed associations currently play a vital role in ensuring a strong local community presence, and will continue to play such a role as we transition to our enhanced monitoring system. To do that, we will develop and identify the appropriate processes to enable the necessary dialogue and involvement between the airshed associations and the future arms-length agency.

I also acknowledge the strong voice of support expressed by both CASA and the airshed associations on the need for sustainable funding of the monitoring system. In particular, airshed associations emphasized the need to extend the funding to the airshed associations for not only the ambient air monitoring work, but also for the work the associations do with regard to outreach and education. Your work in those areas is valuable and needs to be supported. We continue to work on developing the necessary mechanisms that will provide sustainable funding to the monitoring system, and subsequently, to groups such as yours.

.../2

I appreciated the opportunity to engage in discussion with the Joint Standing Committee, and would welcome a future opportunity in the late fall of 2013 or early in 2014 to meet again with the full committee to provide an update on our progress toward the arms-length agency and an enhanced provincial environmental monitoring system.

Thank you again for engaging and showing your interest in this initiative.

Sincerely,



Ernie Hui
CEO, Environmental Monitoring

cc: Rick Blackwood
ESRD

Sharon Willianen
ESRD

Status Report

Item: 3.2 2013 Electricity Framework Review Project Team

Task: To provide an update on the Electricity Framework Review (EFR) project team.

Background: The *Emissions Management Framework for the Alberta Electricity Sector* recommends that a formal review of the framework be undertaken every five years. The intent of the Five-Year Review is to assess new emission control technologies, update emission limits for new generation units, determine if emission limits for new substances need to be developed, review implementation progress, and determine if the Framework is achieving its emission management objectives. This review should include a multi-stakeholder group consisting of industry, government, non-government organizations, and communities with an interest in the electricity sector.

The first Five-Year Review occurred in 2008. In December 2012, the board reviewed and approved the Statement of Opportunity for the the second Five-Year Review of the Framework and formed a working group. The working group's task was to draft a Project Charter which was presented to the Board in March 2013. At that time, the Board approved the Project Charter and the formation of a project team.

Status: The EFR project team has met seven times since they were formed. They will have their eighth meeting at the CASA offices on November 28 and 29, 2013. At this meeting, stakeholders will focus on the implications of the implementation of the federal *Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations*. The team will discuss how to address issues resulting from the implementation of these regulations together with the *Emissions Management Framework for the Alberta Electricity Sector*. Any options discussed should address the range of interests at the table and meet the original outcomes of the Framework.

Upon request, a verbal update can be provided at the Board meeting.

Status Report

Project: 3.2 Odour Management Team

Background: In March 2013, the Board approved the odour management project charter and directed the Secretariat to coordinate the formation of an odour management team. The project charter outlines seven areas of work for the team, and, in accordance with advice received from the Board, the team prioritized complaints, odour assessment, and health as the first areas where work would begin.

Status: The team has prepared workplans for the three prioritized areas of work and convened three task groups to undertake the work. These task groups regularly report on their progress to the team, who provide additional direction and guidance as required. The task groups began meeting in October/November 2013.

Tasks for the task groups include:

- Complaints Task Group:
 - Developing a baseline understanding of the complaints landscape in Alberta, including gaps and strengths.
 - Conducting a cross-jurisdictional review of best practices outside Alberta relating to complaint response and tracking mechanisms.
 - Developing tools to help address gaps and to highlight strengths in the Alberta system.
- Odour Assessment Task Group:
 - Evaluating odour assessment tools and their possible application in Alberta.
 - Developing a user-friendly tool that links different odour issues to appropriate odour assessment tools and practices.
- Health Task Group:
 - Developing tool(s) for tracking health-related impacts of odour.
 - Summarizing background material on odour and health.

The team is keenly aware of the links between these areas of work. The task groups will coordinate their work with the help of the team.

The team will proceed based on their timeline of 18 to 22 months, but expect to have a better understanding of overall timelines and whether work is on track once the task groups have more fully fleshed out their



workplans. The team will receive an update from the task groups in January.

The team has received a grant from Alberta Environment and Sustainable Resource Development for \$150,000. Industry discussions around funding can be updated as follows:

- CAPP is prepared to provide funding, with the request that these funds are tied to a specific deliverable.
- The Alberta Forest Products Association cannot commit any funds at this time. It is not usually the prerogative of the AFPA to provide funding; rather it is at the discretion of the individual pulp mills (who are members of the AFPA). However, if a specific funding request came up that was linked to a deliverable that is of particular interest to AFPA and its members they may be open to discussion.
- Discussions within the agricultural sector continue although there is no commitment at this point in time to provide funds.

The team will meet next in January 2014.

Attachments:

None.

DECISION SHEET

ITEM: 4.1 Alberta Capital Airshed Endorsement

ISSUE: The Alberta Capital Airshed (ACA) is requesting CASA's endorsement to be recognized as Alberta's ninth airshed zone.

BACKGROUND: The Alberta Capital Airshed (ACA) is a not-for-profit, multi-stakeholder organization addressing air quality in the Alberta Capital Region through:
Air Quality Monitoring

- Providing accessible air quality information to all stakeholders, including the public
- Facilitating and supporting strategic expansion of air quality monitoring

Air Quality Education

- Increasing air quality literacy of the public through communications and outreach
- Facilitating access for members to air quality information
- Providing educational opportunities on topic-specific air quality issues

Air Quality Management

- Protecting and improving air quality in the region through facilitating communication and engagement amongst all stakeholders

ACA is one of nine airsheds in Alberta, who together serve as an air monitoring partnership for Albertans.

STATUS: The ACA meets all of the requirements to apply for endorsement by CASA.

ATTACHMENTS:

- A. Alberta Capital Airshed Society Bylaws
- B. List of the Board of Directors
- C. List of Members
- D. List of Committees and members of committees
- E. Terms of reference for Technical Working Group
- F. Communications Plan
- G. ACA Strategic Plan
- H. ACA Annual Report 2012/13 (hard copies will be handed out at the meeting)
- I. ACA Regional Monitoring Network Plan

DECISIONS: Approve the Alberta Capital Airshed as a CASA Airshed Zone.

Alberta Capital Airshed Society Bylaws

LOCATION

- The Airshed Boundaries are described as follows:
- East from Edmonton along Highway 16 to the eastern boundary of Strathcona County
- South along Strathcona County Line to Leduc County
- South along Leduc County line to southern limit
- West along Leduc County Line to Highway 795 (this is the West Central Airshed Boundary)
- North along Highway 795 to intersection of Highway 39
- Directly north of Highway 39 to Highway 627
- West along Highway 627 to intersection of Highway 777
- North to connect Highway 777 and continue north to Northern edge of Lac Ste. Ann County
- East along County Line to Sturgeon County
- East along Sturgeon County Line to northern extension of Edmonton 97 St (Highway 28) (this is Fort Air Partnership Boundary)
- South to Edmonton city limit
- Clockwise around city to Highway 16

DEFINITIONS

In these bylaws, unless the context otherwise requires:

- a. "Act" means the Societies Act R.S.A. 1980, Chapter S-18 as amended or any statute substituted for it;
- b. "Society" means the Alberta Capital Airshed Society;
- c. "Member" means any individual person accepted as a member, or any organization accepted as a member in accordance with Articles 1 through 11 inclusive;
- d. "Board of Directors" or "Board" means the Board of Directors elected or appointed from time to time by the Members of the Society, as described in Articles 12 to 21 inclusive and paragraph 42;
- e. "Executive Committee" or "Executive" means the Officers of the Society, as described in paragraph 18;
- f. "Consensus" means unanimous consent in a quorum. One or more directors voting against a motion will be required to prevent a consensus decision. An abstention by a director shall not prevent a consensus decision. The Consensus Decision Making Model is defined by the Clean Air Strategic Alliance (CASA).
- g. "Quorum" means attendance of fifty percent plus one (50% + 1) of the Members entitled to be present at a meeting, as described in paragraph 29 and paragraph 42.

MEMBERSHIP

1. **MEMBERSHIP FEES.** All Members will pay a membership fee. Membership fee in the Society will be fixed, from time to time, by the members at a general meeting.
2. **INDIVIDUAL MEMBERS.** Subject to Article 7 and 11 and by agreement of the Board, any person who's principle residence is within the airshed boundaries becomes a member upon payment of the applicable membership fee. Individuals must be members of the Society for a period of not less than one (1) year before electing to stand for nomination to the Board of Directors in order to show commitment to the Society.
3. **INDUSTRY MEMBERS.** Subject to Article 7 and 11 and by agreement of the Board, any firm, person, corporation or association having an economic stake, interest in or other stake in air quality within the airshed boundaries, may become a Member upon payment of the applicable membership fee.
4. **NON-GOVERNMENTAL ORGANIZATION.** Subject to Article 7 and 11 and by agreement of the Board, any firm, person, corporation or association which is a non-governmental organization who has as its primary objective the preservation or conservation of the environment, or the relationship between human health and air quality, or represents interest likely to be directly affected by air quality initiatives, or any other organization accepted by the Board, becomes a member upon payment of the applicable membership fee.
5. **GOVERNMENT MEMBERS.** Subject to Article 7 and 11 and by agreement of the Board, any Federal, Provincial, Municipal or Aboriginal Government, government department, government agency or Regional Health Authority having an economic stake, interest in, or responsibility for human health and/or air quality, or representing interests likely to be directly affected or responsible for air quality initiatives within the airshed boundaries becomes a member upon payment of the applicable membership fee.
6. **MEMBER GROUP.** Upon acceptance of a Member, the Board shall designate which Member Group (Industry, Non-Governmental Organization or Government) the Member shall be included in, if applicable. Individual Members will not be designed as a Member Group. Individual Members will not be counted to determine quorum.
7. Members are responsible for behaving in accordance with the bylaws, in accordance with the Society's principles and values, and in pursuit of the objectives of the Society. Members have the right to attend and participate in meetings of the Society, and to run in elections to the positions of Officers or Directors.
8. **REPRESENTATIVES.** Each Member shall appoint one (1) individual person to act as its representative at all meetings of the Members. Each Member shall notify the Secretary of the Society in writing of the name, address, telephone number and occupation of the representative. Each Member should appoint one (1) individual person to act as its alternative representative at any meeting the representative cannot attend. Each Member shall notify the Secretary of the Society in writing of the name, address, telephone number and occupation of the alternate representative. Representatives and their alternative representatives constitute one and the same vote for their respective organizations.
9. A membership may be purchased at any time, but all memberships expire on March 31.

10. Any Member wishing to withdraw from membership may do so upon a notice in writing to the Board through its Secretary. If any Member is in arrears for fees for any year, such member shall be automatically suspended at the expiration of six months from the end of such year (June 1) and shall thereafter be entitled to no membership privileges or powers in the Society until reinstated.
11. Any Member may be expelled from membership by a two thirds (2/3) vote of the Board of Directors, for any reason deemed, by the Board, to be injurious to the objectives of the Society or for failing to contribute to the objectives of the Society at a Board meeting that has been preceded by four (4) weeks notice of intent to expel the Member. If the motion does not pass, the procedure will not be renewed in respect of said Member during the balance of the membership year. Expulsion will not be the first line of recourse to address issues of concern.

BOARD OF DIRECTORS

12. BOARD OF DIRECTORS. The Board of Directors shall be constituted of no less than seven and no more than twelve Members in good standing in accordance to Article 42.
13. The Board shall, subject to the bylaws or directions given in at any meeting properly called and constituted, having full control and management of the affairs of the Society.
14. MEETINGS OF THE BOARD. The Board shall meet as often as may be required, but at least once every three months. Meetings of the Board shall be called by ten (10) days notice in email or writing mailed to each Director or by three days notice by telephone. A special meeting may be called on the instructions of any two Directors provided they request to the President in writing to call such meeting, and state the business to be brought before the meeting. Fifty percent plus one (50% +1) of Directors shall constitute a quorum provided that at least one representative is present from each Member Group, in accordance with Article 6. Meetings shall be held without notice if a quorum of the Board is present, provided however, that any business transactions at such meeting shall be ratified at the next regularly called meeting of the Board; otherwise they shall be null and void.
15. A person appointed or elected a Director becomes a Director if they were present at the meeting when being appointed or elected, and did not refuse the appointment. They may also become a Director if they were not present at the meeting but consented in writing to act as Director before the appointment or election, or within ten days after the appointment or election, or if they acted as a Director pursuant to the appointment or election.
16. The term for Directors shall be two years. Members may sit as Directors for Consecutive terms, with no limit.
17. Any Director may be removed from the Board, upon a majority vote of not less than two thirds (2/3) of the Directors, from office for any cause which the Society may deem reasonable.
18. Any vacancy occurring during the year may be filled at the next meeting, provided it is so stated in the notice calling such meeting and all Members are made aware of the vacancy 10 days prior to the meeting. Any Member in good standing shall be eligible to become a Director in the Society.

OFFICERS

19. The Officers of the Society will consist of a President, Vice-President, Secretary and Treasurer and such other officers as the Board of Directors may determine from time to time. Each Officer shall also be a Director. Officers will be elected at a Board meeting.
20. In order to stand for a position of an Officer, a Director is required to have served on the Board of Directors for a minimum of one year prior to standing for election.
21. The Executive Committee, which consists of the Officers of the Society, will oversee the execution or implementation of decisions made by the Board.
22. The term for Officers shall be two years. Members may sit in Office for consecutive terms to a limit of four years in the same position. No more than half of the Officers should be replaced each year, and terms may be amended at the discretion of the Board.
23. Any Director may be removed from Office, at a Board meeting upon majority vote of not less than 2/3 Directors, for any cause which the Society may deem reasonable.
24. Any vacancy occurring during the year may be filled at the next meeting, provided it is so stated in the notice calling such meeting. Any Director in good standing shall be eligible to become an Officer in the Society. In the case of a vacancy occurring during the year, appointment or election to office may coincide with appointment or election to the Board.
25. **PRESIDENT.** The President shall have such duties as the Board may specify and delegate. He/she shall, when present, preside at all meetings of the Board, General and Special Meeting. During the absence or inability of the President, his/her duties and powers shall be exercised by the Vice-President. In the absence of both, a chairperson may be elected at the meeting to preside.
26. **VICE PRESIDENT.** The Vice-President shall have such duties as the Board may specify and delegate. During the absence or inability of the President, his/her duties and powers shall be exercised by the Vice-President.
27. **SECRETARY.** It shall be the duty of the secretary to attend all meetings of the Board, Special and General meetings, and to keep or cause to be kept accurate minutes of the same. The Secretary shall have charge of all the correspondence of the Society and be under the direction of the President and the Board. The Secretary shall also keep records of all the Members of the Society and their addresses, send all notices of the various meetings and membership invoices, as required. In case of the absence of the Secretary, his/her duties shall be discharged by such Director as may be appointed by the Board.
28. **TREASURER.** The Treasurer shall receive all monies paid to the Society and be responsible for the deposit of same in whatever Bank, Trust Company, Credit Union or Treasury Branch the Board may order. He/she shall properly account for the funds of the Society and keep such books as may be directed. He/she shall present a full detailed account of receipts and disbursements to the Board whenever requested and shall prepare for submission to the Annual Meeting a statement duly audited of the financial position of the Society and submit a copy of same to the Secretary for the records of the Society. The Office of the Secretary and Treasurer may be filled by one person if any annual meeting for the election of officers shall so decide.
29. **POWERS AND DUTIES OF OTHER OFFICERS.** The powers and duties of all other officers shall be such as the terms of their engagement call for or as the Board may specify and delegate.

DECISION MAKING

30. Any Member who has not withdrawn from membership nor has been suspended nor expelled shall have the right to participate in decision-making at any meeting of the Members of the Society as described in Articles 41, 44 and 45. Such contributions must be made in person and not by proxy or otherwise.
31. QUORUM. The quorum for the transaction of business at any meeting of the Board shall consist of fifty percent plus one (50% + 1) of the Directors provided that at least one representative is present from each Member Group in accordance with to Article 42.
32. Decisions in respect to matters of policy, including without limitation those matters specified in the objects of the Society will be made by way of Consensus. Consensus will be achieved following the consensus process model defined by the Clean Air Strategic Alliance (CASA). An abstention by a Director shall not prevent a consensus decision.
33. Decisions in respect to administrative matters will be made by majority vote of not less than fifty percent plus one (50% + 1) with quorum.

ADMINISTRATION

34. EXECUTIVE DIRECTOR. The Board of Directors may from time to time contract an Executive Director, who shall be an ex-officio member of the Board of Directors without voting or consensus decision making privileges. The Board of Directors may delegate to the Executive Director full authority (subject to any restrictions contained in the Act or imposed from time to time by the Board) to manage and direct the business and affairs of the Society. The Executive Director shall at all reasonable times give to the Board of Directors all information the Board may require regarding the affairs of the Society.

AUDITING AND FINANCIAL

35. The financial records of the Society shall be audited at least once each year by a duly qualified accountant and by two members of the Executive. A complete and proper statement of the standing of the books for the previous year shall be submitted by such auditor at the Annual Meeting of the Society. The fiscal year of the Society in each year shall be March 31st.
36. The books and records of the Society may be inspected by any member of the Society at the Annual General Meeting or at anytime upon giving reasonable notice and arranging a time satisfactory to the officer or officers having charge of same. Each Director shall at all times have access to such books and records.
37. The Board may pay such bills and invoices as may be presented to it from time to time to meet any ongoing financial commitments of the Society between general meetings without the prior approval of the Members.
38. Any two of the President, Treasurer, Vice-President or Secretary may sign on behalf of the Society all contracts, cheques, and all other documents pertaining to the affairs of the Society as approved by the Board of Directors in the annual budget.
39. Unless authorized at any meeting and after notice for same shall have been given, no officer, director, or member of the association shall receive any remuneration for his/her services.

40. The Society will continue to meet its objectives based on the annual budget approved by the Board of Directors and the grant funding approved by the grantee. The Society will not have the authority to borrow or raise or secure the payment of money in particular by the issue of debentures.

MEETINGS OF THE MEMBERS

41. ANNUAL GENERAL MEETING. The Society shall hold an annual meeting of the Members on or before June 30th of each year, of which notice in writing to the last known address or email address of each member shall be delivered 28 days prior to the date of the meeting.
42. At the Annual General Meeting, Directors shall be elected as necessary, and there shall be no fewer than seven (7) and no more than twelve (12) Directors. Every effort will be made to ensure a fair and balanced representation from each sector. Four (4) board seats will be held for Industry; four (4) board seats will be held for Government and four (4) board seats will be held for Non-Governmental Organizations. In the event that any of these Member Groups do not fill one of the seats, that seat will not be included in the current year Board of Directors. The remaining three (3) seats will be open to election to any Individual Members subject to Article 2 and any additional Member Group representatives in excess of their allocated seats seeking nomination.
43. The Directors so elected shall form the Board of Directors. At the first meeting of the Board following the election of the Directors, there shall be elected, the Executive Officer positions made up of the President, vice-President, Secretary, Treasurer, (or Secretary-Treasurer) in accordance with Articles 25 through 28 inclusive.
44. SPECIAL MEETINGS. A special meeting of the Members shall be called by the President or Secretary upon receipt of a petition signed by one-third (1/3) of the members in good standing, setting forth the reasons for calling such meeting, which shall be by letter to the last known address or email of each member, delivered in the mail and/or electronically eight days prior to the meeting.
45. GENERAL MEETINGS. General meetings of the Society may be called at any time by the Secretary upon the instructions of the President or Board by notice in writing or via email to the last known address of each Member, delivered in the mail and or electronically eight days prior to the date of such meeting.
46. QUORUM. The quorum for the transaction of business at any meeting of the Members shall consist of fifty percent plus one (50% + 1) of the Members provided that at least one representative is present from each Member Group.
47. Decisions in respect to matters of policy, including without limitation those matters specified in the objectives of the Society will be made by way of Consensus. Consensus will be achieved following the consensus process model defined by the Clean Air Strategic Alliance (CASA).
48. Decisions in respect to administrative matters will be made by majority vote of not less than fifty percent plus one (50% + 1) with quorum.

DISSOLUTION

49. In the event of dissolution of the Society, any unspent monies will be returned to, or renegotiated with, the grantee.

BYLAWS

50. The Bylaws may be rescinded, altered or added to by a "Special Resolution" at any Meeting of the Members of the Society.
51. The amended bylaws take effect after approval of the special resolution and acceptance by the Corporate Registry of Alberta.

Alberta Capital Airshed Society 2013 Board of Directors

Brent Korobanik	President	Lehigh Inland Cement 12640 Inland Way Edmonton, AB T5V 1K2	BKorobanik@lehighcement.com Phone: 780.420.2562
Mike Mellross	Vice President	City of Edmonton Office of Environment Suite 750, Tower 1 Scotia Place 10060 Jasper Avenue NW Edmonton, AB T5J 3R8	Mike.Mellross@edmonton.ca Phone: 780.442.6975
Darcy Garchinski	Secretary/Treasurer	Alberta Health Services Alberta Health Services HSBC Building 7th Floor, Suite # 700 10055-106 Street Edmonton, AB T5J 2Y2	Darcy.Garchinski@albertahealthservices.ca Phone: 780-735-1786
Raquel Feroe	Director	Eco Air 10144 – 87 Street Edmonton, AB T5H 1N4	Rferoe@telusplanet.net Phone: 780 421 0975
Lisa Avis	Director	Alberta Environment and Water 4999 – 98 Avenue Edmonton, AB T8A 2X3	Lisa.avis@gov.ab.ca Phone: 780.643.1874
David Hill	Director	Momentive Specialty Chemicals 12621 - 156 Street Edmonton, AB T5V 1E1	david.hill@momentive.com Phone: 780.447.1270
Forrest Tittle	Director	NAIT 11762-106 Street NW Edm	forrestt@nait.ca Phone: 780.491.3183
Frederic Picard	Director	Strathcona Industrial Association PO Box 3374, SP MPO Sherwood Park, AB T8H 2T3	frederic.picard@riotinto.com Phone: 780 449 8301
Jocelyn Thrasher-Haug	Director	Strathcona County 2001 Sherwood Drive Sherwood Park, AB T8A 3W7	jocelyn.thrasher-haug@strathcona.ca phone: 780 464 8093
Gary Redmond	Executive Director	Alberta Capital Airshed 147, 9218 Ellerslie Road SW Edmonton, AB T6X 0K6	gredmond@capitalairshed.ca Phone: 780 935 4279

Alberta Capital Airshed
2013/14 Membership*Non-Government Organizations*

Eco-Air
The Lung Association
University of Alberta
NAIT

Government

Alberta Environment & Sustainable Resource Development
Alberta Health Services
City of Edmonton
Strathcona County
City of St. Albert
City of Leduc

Industry

Strathcona Industrial Association
Keyera Alberta Envirofuels
Capital Power
Enbridge
EPCOR
Imperial Oil
Celanese
AltaSteel
Kinder Morgan
Rio Tinto Alcan
Suncor
Edmonton Waste Management Centre
Owens Corning
Lehigh Cement
Momentive Specialty Chemicals
ATCO Energy Solutions

Alberta Capital Airshed
Committees

Technical Working Group

Jeff Yanew, Chair	St. Albert
Brent Korobanik	Lehigh Cement
Sean McGregor	Strathcona Industrial Association
Jocelyn Thrasher-Haug	Strathcona County
Shelley Morris	Environment & Sustainable Resource Development
Gary Redmond	ACA
Brenda Barber	ACA

Communications and Outreach

Alana Yim	Strathcona Industrial Association
Sarah Mate	Strathcona County
Phoenix Le	Environment & Sustainable Resource Development
Karen Yeung	City of Edmonton
Brent Korobanik	Lehigh Cement
Gary Redmond	ACA
Brenda Barber	ACA

Alberta Capital Airshed

Technical Working Group Terms of Reference

August, 2012

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The Alberta Capital Airshed (ACA) formed a Technical Working Group (TWG) to assist in the airshed's role within regional air quality monitoring.

1.0 ACA TWG Purpose

- 1.1 To support the ACA Board's Vision and Mission
- 1.2 To develop a regional ambient air monitoring plan for the ACA
- 1.3 To monitor and direct the implementation, operation, reporting, and management of regional air quality monitoring to:
 - deliver relevant, accurate, reliable, and credible ambient air quality information that addresses regional air quality issues important to all stakeholders
 - deliver air quality monitoring and reporting in a cost effective manner.
 - ensure that regulatory requirements for ambient air quality monitoring and reporting are met.
- 1.4 To act on behalf of the ACA as technical representation as well as provide technical expertise to the Board.
- 1.5 To make recommendations to the ACA Board for their approval.

2.0 ACA TWG Operating Principles

- 2.1 The TWG will follow ACA's Mission and mandate and will operate within ACA's guidelines and policies.
- 2.2 The TWG will ensure that monitoring effectively addresses stakeholder needs.
- 2.3 Members will actively participate and contribute to regular meetings and the committee's work.
- 2.4 Members will communicate with employers, working committees and the Board on the ACA objectives, priorities and accomplishments, as well as any issues that may need to be resolved.
- 2.5 Meetings will be documented with summary notes and decision records.
- 2.6 The TWG will strive for consensus recommendations and decisions. If it becomes clear that the TWG cannot make a consensus recommendation, the recommendation of the majority and the non-consensus position(s) will be presented for the ACA Board to decide.
- 2.7 Ad-hoc focused task groups may be formed to review specific issues and advise the TWG on a path forward.
- 2.8 Outside expertise may be invited to contribute as required.

3.0 ACA TWG Membership

The membership of the ACA TWG is made up of core committee members and resource members. Core committee members are selected by the bodies that they represent. Resource members are included by invitation of the Technical Director or ACA Executive Director.

Committee Membership

- Alberta Environment and Sustainable Resource Development (AESRD)
- Strathcona Industrial Association (SIA) Representative
- Other Industry Representatives
- Alberta Health Services Representative

- Municipal Representative(s)
- Public member(s) of the ACA Board
- Executive Director, ACA

4.0 Roles and Responsibilities of the ACA TWG and its Members

4.1 ACA TWG Members (in general)

- 4.1.1 Maintain a base of information to represent regional ambient air quality, including but not limited to the following:
 - Continuous ambient air monitoring data
 - Passive ambient air monitoring data
 - Ambient air quality studies that are relevant to the airshed
 - Ensure the continued maintenance of a regional emissions inventory
- 4.1.2 Maintain ambient air monitoring stations in good working order, including the following:
 - Monitor the performance of the primary contractor and related issues.
 - Develop and implement an equipment replacement program, to be updated annually.
 - Review the monitoring program to ensure that appropriate parameters are being monitored using appropriate monitoring methods.
 - Evaluate the effectiveness of the monitoring program to meet ACA's mandate.
 - Consult with other airsheds.
 - Update the monitoring network plan as required.
- 4.1.3 Assess air quality data on a monthly basis and make recommendations as required regarding the operation of the instruments and/or network.
- 4.1.4 Actively participate in monthly meetings and provide technical knowledge and support, as well as the viewpoints of the sector and profession they represent.
- 4.1.5 Provide support for planning future phases of regional monitoring development, including working with new industry to set up additional monitoring systems.
- 4.1.6 Participate in external technical working groups involved in air and air monitoring issues.
- 4.1.7 Participate in the development of a core monitoring and project specific annual work plan and budget, in alignment with ACA's Annual Business Plan and the budget.
- 4.1.8 Engage other expertise as needed from member organizations and/or others as appropriate.
- 4.1.9 Perform QA/QC functions as required by ACA's Quality Assurance Program.
- 4.1.10 Support the ACA Board and/or Executive Director as required.

4.2 Specific ACA TWG Member Roles

4.2.1 ACA TWG Chairperson

- Lead and advance the development of monitoring plans, equipment plans, and monitoring budgets with the support of the TWG.
- Manage and oversee the work of the monitoring contractor.
- Act as TWG Chair to convene meetings, prepare agendas, arrange for minute taking and distribution of minutes.
- Compile data into graphs on a monthly basis for review by the TWG.
- Compile and submit reports including monthly compliance reports, annual technical reports, equipment downtime follow-up, and exceedance follow-up letters which have not been sourced to industry.
- Act as the ACA point-of-contact regarding new technology.
- Act as the ACA point-of-contact for providing monitoring details and data.
- Ensure that the monitoring network is operated in a cost effective manner.
- Report to the ACA Board as a representative of the TWG.

4.2.2 ACA Executive Director

- Act as a liaison between the ACA Board and TWG, advising the TWG on ACA policies and guidelines as required.
- Act as a liaison between the ACA Communications Team and TWG.
- Maintain collaborative relationships with stakeholders.

4.2.3 Industry Members and SIA Representative

- To understand and represent the interests of their profession, their industry, their company, and their company's regulatory requirements to monitor ambient air quality.
- Ensure that the monitoring network is operated in a cost effective manner.
- Ensure ACA's monitoring is sufficient to understand the environmental impact of cumulative and individual industrial emissions.
- The SIA representative will act as a liaison to and from the SIA Board.

4.2.4 Public Members

- Represent the public interest, bringing a public perspective to the TWG.
- Ensure that the monitoring network is operated in a transparent manner.

4.2.5 AESRD Representative

- Provide a link to other Government of Alberta staff and resources.
- Act as a liaison between ACA TWG and AESRD regarding regulatory requirements, policy development, approvals, etc.
- Provide technical support to the monitoring network in the form of annual audits, equipment if available and calibration/testing of analyzers and calibration gases when required.

4.2.6 Monitoring Contractor

- Ensure daily operation of the air monitoring network.

- Perform daily QA/QC inspection of daily zero/span and other instrument performance data.
- Provide recommendations for equipment upgrades and replacement as required.
- Accommodate AESRD audits of the monitoring network on an annual basis and Environment Canada audits as required.
- Provide ambient air quality data to AESRD real-time data site hourly and validated data to the CASA data warehouse monthly.
- Provide immediate notification of Alberta Ambient Air Quality Objective(AAAQO) exceedances and equipment downtime and other alarms, as per ACA protocols.
- Perform other requirements as stated in the contract and ACA's Quality Assurance Program.

5.0 Performance Targets of the ACA TWG

5.1 The ACA TWG will:

- 5.1.1 Meet a minimum of eight times per year.
- 5.1.2 Operate properly functioning stations that meets or exceeds regulatory requirements including AESRD's Air Monitoring Directive, Environmental Protection and Enhancement Act (EPEA) Approvals, and other regulatory requirements on behalf of participating companies and per other ACA requirements.
- 5.1.4 Ensure that the annual station average monitoring uptime is at 98% or higher.
- 5.1.5 Ensure that monitoring data forms the basis for ongoing ACA reports to the community, weekly Air Quality Index reports and annual reports.
- 5.1.6 Provide monitoring data via website links or other means.
- 5.1.7 Ensure accurate and timely compliance reporting.
- 5.1.8 Work with new industry and AESRD to implement new monitoring requirements as per regulatory and ACA requirements.
- 5.1.9 Identify gaps in the existing monitoring network or knowledge base.
- 5.1.10 Develop an annual monitoring budget and work plan which will be presented to the ACA Board for approval in September of each year.
- 5.1.11 Maintain a quality assurance program.
- 5.1.12 Operate the monitoring network within the annual budget.

Alberta Capital Airshed 2013-14 Communications Plan



Background

- ACA is a not-for-profit, multi-stakeholder organization.
- Monitors and provides public information on air quality, and facilitates dialogue among community, industrial and government stakeholders.
- ACA is one of the newest of nine airsheds in the province.
- Strategic Plan for 2013-16 completed.

Why Communicate?

- **To inform:** An organization may need to let interested parties know who you are, what you can do for them, what they can do to help you, or even just how to get in touch.
- **To build understanding or change behavior:** You may want to encourage others to think, act or feel a certain way; to stop smoking, for example. This can involve appealing to feelings, self-interest, or a person's imagination.
- **To prevent misunderstandings:** Even a small misunderstanding can create large problems for your organization. You can ensure good communication by putting yourself in your audience's position, paying attention to their needs and getting to know them.
- **To present a point of view:** Often, this is all you need to do to accomplish your goal.
- **To lower barriers between groups and individuals:** These barriers may range from information overload to suspicion and prejudice.

What is Strategic Communications?

- Is part of the management process.
- Is a change agent.
- Is a two-way process.
- Must be grounded in the interests and language of the receiver.
- Must be compelling to be noticed.
- Must be credible, continuous and consistent to be effective.
- The primary responsibility for internal communication rests with managers and supervisors.

Key Elements to Strategic Communications

- Keep it simple so that everyone involved knows the goal and their role;
- Make it targeted – doing the *right* things, not everything;
- Build in review mechanisms for forward planning and horizon scanning;
- Update it regularly in the light of experience and opportunities;
- Share it effectively with leadership (Board, Executive); and
- Share successes and knowledge about what works – and what doesn't.

ACA Communication Goals

- Increase the profile and reputation of the Alberta Capital Airshed with local and provincial governments, and other stakeholders.
- Demonstrate the value the ACA brings to the regional airzone and provincial air network through effective engagement and positive relationships.
- Position ACA as primary source of air quality information in the Edmonton Census Metropolitan Area (between West Central Airshed Society and the Fort Air Partnership)

Alberta Capital Airshed

2013-14 Communications Plan

- With an emphasis on web presence, position ACA as key agent/resource to help people find information about important air quality topics
- Protect public interests by monitoring current or identifying emerging issues that have positive and/or negative implications on air quality in the region.

Communication Principles

- Through the ACA governance structure, ACA communication activities will be proactive and visible to its stakeholders.
- ACA communication activities will be timely, succinct, consistent, and credible.
- ACA communication activities and messages will reflect the needs of its stakeholders and will be consistent with ACA strategic objectives.
- Communication initiatives are delivered in a cost effective and efficient manner.

Target Audiences

Primary

- Public and Media
- Environmental groups
- Regional industries
- Elected and key non-elected representatives from Municipal Governments and Capital Region Board, including
 - City of Edmonton
 - Strathcona County
 - Sturgeon County
 - City of St. Albert
 - Leduc County
 - Parkland County
 - Town of Stony Plain
 - City of Spruce Grove
- Elected and key non-elected representatives from Government of Alberta (Environment and Sustainable Resource Development)

Secondary

- Clean Air Strategic Alliance (CASA) and other Airsheds
- Environment Canada

**Alberta Capital Airshed
2013-14 Communications Plan**

COMMUNICATIONS STRATEGY	SUPPORTING TACTICS (TOOLS, COLLATERALS, PRODUCTS, ETC.)
Align communication activities with the ACA Strategic Plan to ensure activities are measurable.	<ul style="list-style-type: none"> • Conduct needs assessment with key internal and external stakeholders to identify the following: <ul style="list-style-type: none"> • Emerging issues that will have communication implications – political or otherwise • Governance expectations • What success looks like • Communication needs • Preferred communication and engagement methods • Level of awareness and understanding of air monitoring • Others as identified • Review communications plan on an annual basis to ensure expectations are being met and to identify if and what needs to change/evolve. <p>Note: some of this activity has already been conducted and captured in ACA's 2013-16 Strategic Plan. The above would focus more on communications and engagement.</p>
Apply a proactive issues management approach to communications.	<ul style="list-style-type: none"> • Maintain stakeholder database • Maintain key message deck (living document) • Issues management matrix • White/position papers, as needed • Media relations, as needed
Ensure ACA has the necessary communications tools and products in place to effectively and efficiently communicate and engage with its stakeholders.	<p>Completed or underway</p> <ul style="list-style-type: none"> • Visual identity (completed) • Website (completed) • Annual Report (completed) • Annual Technical Report (completed) • Strategic Plan 2013-16 (completed) • PPT Template and standard presentations (completed) • Public displays (completed) • Annual Report (completed) <p>New</p> <ul style="list-style-type: none"> • Postcard (for leave behind at events, etc.)

**Alberta Capital Airshed
2013-14 Communications Plan**

COMMUNICATIONS STRATEGY	SUPPORTING TACTICS (TOOLS, COLLATERALS, PRODUCTS, ETC.)
	<ul style="list-style-type: none"> • ACA fact sheet series (once it is identified how currently available good resources can or needs to be adapted to include regionally specific content) • Video specific to ACA region • Backgrounders as required • Story bank (feature articles usable in various applications)
<p>Create opportunities to engage with key stakeholders.</p>	<ul style="list-style-type: none"> • Leverage existing stakeholder events hosted by other like-minded regional organizations <ul style="list-style-type: none"> • Clean Air Day • Key municipal and/or community events • Create/host signature ACA stakeholder events <ul style="list-style-type: none"> • Annual ACA Odour Management Workshop • Annual ACA Community Day • Advocacy Ad Campaign • Seek speaking engagements/presentations (schools, associations, etc.) • Bi-monthly electronic newsletter • Identify other newsletter and publications that could utilize ACA content • Active social media (Facebook and Twitter) • Media relations to build awareness and credibility with the public



Alberta Capital Airshed Strategic Plan 2013 - 2016



Air Quality Monitoring

Goal(s):

- Provide accessible air quality information to all stakeholders including public
- Facilitate and support strategic expansion of air quality monitoring

Tactic 1

Ongoing assessment of air quality monitoring

Activities or Tactics

2013/14

- Facilitate sharing of monitoring network assessments (ACA, ESRD, SIA, etc.)
- Support monitoring expansion with members
- Facilitate strategic planning for network expansion

2014/15

- Facilitate sharing of monitoring network assessments
- Support monitoring expansion with members
- Facilitate strategic planning for network expansion

2015/16

- Facilitate sharing of monitoring network assessments
- Support monitoring expansion with members
- Facilitate strategic planning for network expansion

Tactic 2

Provide all available ambient AQ data on website

Activities

2013/14

- Add new station data to website as available
- Evaluate usefulness of data with web users
- Provide any additional AQ data (including reports, summaries, etc.) on website
- Develop annual regional summary of air quality data (with comparisons to previous years for trend analysis)
- Determine if historical AQHI information can be provided
- Add Alberta Ambient Air Quality Objectives thresholds to website
- Evaluate usefulness of annual regional air quality data

2014/15

- Add new station data to website as available

2015/16

- Add new station data to website as available

Tactic 3
 Assume management of air monitoring stations

Activities

<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>
<ul style="list-style-type: none"> <input type="checkbox"/> Complete necessary requirements to assume management role of two ESRD stations. <input type="checkbox"/> Assume management role of two ESRD stations. <input type="checkbox"/> Encourage stakeholders/ members to consider ACA for management of any new stations 	<ul style="list-style-type: none"> <input type="checkbox"/> Manage ESRD stations <input type="checkbox"/> Liaise with members to determine if ACA management of additional member AQ stations is possible 	<ul style="list-style-type: none"> <input type="checkbox"/> Manage ESRD stations <input type="checkbox"/> Liaise with members to determine if ACA management of additional member AQ stations is possible

Tactic 4
 Passive Monitoring

Activities

<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>
<ul style="list-style-type: none"> <input type="checkbox"/> Consider passive monitoring when finalizing regional monitoring plan 	<ul style="list-style-type: none"> <input type="checkbox"/> To be determined 	<ul style="list-style-type: none"> <input type="checkbox"/> To be determined

Tactic 5
 Air Quality Sensors

Activities

<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>
<ul style="list-style-type: none"> <input type="checkbox"/> Deploy sensors at AQ stations to evaluate validity 	<ul style="list-style-type: none"> <input type="checkbox"/> Investigate partnership with Centre for Toxicology <input type="checkbox"/> Provide evaluation of sensors to members 	<ul style="list-style-type: none"> <input type="checkbox"/> To be determined

Education

Goal(s):

- Increase air quality literacy of public in region
- Facilitate access for members to air quality information
- Provide educational opportunities on topic-specific air quality issues

Tactic 1

Develop a communications plan that supports understanding of air quality and raises awareness of ACA

Activities

<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>
<input type="checkbox"/> Finalize a communications plan <input type="checkbox"/> Develop a strategy to promote AQHI <input type="checkbox"/> Participate in designated environment events (Environment Week, Clean Air Day, etc.) <input type="checkbox"/> Provide support to municipalities and other agencies in developing and delivering messaging around relevant air quality issues and solutions. <input type="checkbox"/> Map out audiences for outreach <input type="checkbox"/> Seek collaborative partnerships with key stakeholders	<input type="checkbox"/> Update communications plan <input type="checkbox"/> Promote AQHI <input type="checkbox"/> Participate in designated environment events <input type="checkbox"/> Provide support to municipalities and other agencies in developing and delivering messaging around relevant air quality issues and solutions.	<input type="checkbox"/> Update communications plan <input type="checkbox"/> Promote AQHI <input type="checkbox"/> Participate in designated environment events <input type="checkbox"/> Provide support to municipalities and other agencies in developing and delivering messaging around relevant air quality issues and solutions.

Tactic 2

Facilitate access to information to increase AQ knowledge and understanding amongst ACA members

Activities

<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>
<input type="checkbox"/> Conduct a needs analysis with ACA members and other stakeholders <input type="checkbox"/> Maintain section on website for educational 'tools and resources' <input type="checkbox"/> Develop tools (key message decks, presentations, etc.)	<input type="checkbox"/> Develop an education framework based on results of needs analysis <input type="checkbox"/> Maintain section on website for educational 'tools and resources' <input type="checkbox"/> Develop tools (key message decks, presentations, etc.)	<input type="checkbox"/> Assess changes in air literacy from baseline year. <input type="checkbox"/> Maintain section on website for educational 'tools and resources' <input type="checkbox"/> Develop tools (key message decks, presentations, etc.)

Tactic 3

Provide information about topic specific air quality issues

Activities

<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>
<input type="checkbox"/> Continue to take lead on odour management issues <input type="checkbox"/> Identify strategic gaps on air quality topics and position ACA to meet needs	<input type="checkbox"/> To be determined	<input type="checkbox"/> To be determined

Air Quality Management

Goal(s):

- **Protect and improve air quality in the region**
- **Facilitate communication and engagement amongst stakeholders**

Tactic 1

Participation and support in Capital Region Air Quality Plans

Activities

2013/14	2014/15	2015/16
<input type="checkbox"/> Participate in the Oversight Advisory Committee of the Capital Regional Air Quality Management Framework	<input type="checkbox"/> To be determined	<input type="checkbox"/> To be determined
<input type="checkbox"/> Participate in the Capital Air Partnership		
<input type="checkbox"/> Support initiatives to address PM2.5 issues		

Tactic 2

Odour Management

Activities

2013/14	2014/15	2015/16
<input type="checkbox"/> Participate in CASA-led odour management framework development	<input type="checkbox"/> Determine feasibility of developing an odour management framework	<input type="checkbox"/> To be determined

Tactic 3

Exploration of air quality issues not addressed by existing plans/other initiatives

Activities

2013/14	2014/15	2015/16
<input type="checkbox"/> Determine areas of interest by members and stakeholders through engagement	<input type="checkbox"/> To be determined	<input type="checkbox"/> To be determined
<input type="checkbox"/> Participate in and/or initiate opportunities to address AQ issues not addressed by the plans		

Organizational Capacity

Goal(s):

- Build and sustain an organization which is proactive, relevant and responsive

Tactic 1

Governance & Human Resources

Activities

<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>
<input type="checkbox"/> Update Bylaws	<input type="checkbox"/> To be determined	<input type="checkbox"/> To be determined
<input type="checkbox"/> Develop a Board policies manual		
<input type="checkbox"/> Review and update structure to address new strategic plan		
<input type="checkbox"/> Develop a cyclical strategic planning process for Board and members to engage in annually		

Tactic 2

Membership

Activities

<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>
<input type="checkbox"/> Generate value proposition (what is ACA and what are the benefits to membership)	<input type="checkbox"/> To be determined	<input type="checkbox"/> To be determined
<input type="checkbox"/> Develop and launch membership drive		

Tactic 3

Funding

Activities

<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>
<input type="checkbox"/> Seek grant and operational funding from ESRD	<input type="checkbox"/> Seek grant and operational funding from ESRD	<input type="checkbox"/> Seek grant and operational funding from ESRD
<input type="checkbox"/> Collect membership fees	<input type="checkbox"/> Collect membership fees	<input type="checkbox"/> Collect membership fees
<input type="checkbox"/> Develop sustainable funding plan for ACA (update sector membership fees, liaise with ESRD and Monitoring Agency, etc.)	<input type="checkbox"/> Develop sustainable funding plan for ACA (update sector membership fees, liaise with ESRD and Monitoring Agency, etc.)	<input type="checkbox"/> Develop sustainable funding plan for ACA (update sector membership fees, liaise with ESRD and Monitoring Agency, etc.)
<input type="checkbox"/> Participate and support Alberta Airshed Council initiatives for sustainable funding of Airshed Zones	<input type="checkbox"/> Participate and support Alberta Airshed Council initiatives for sustainable funding of Airshed Zones	<input type="checkbox"/> Participate and support Alberta Airshed Council initiatives for sustainable funding of Airshed Zones



**Alberta Capital Airshed
Draft Regional Monitoring Network Plan**

Prepared by:

Alberta Capital Airshed
Technical Working Group

September , 2013

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1.0 GENERAL INFORMATION

The Alberta Capital Airshed (ACA) is a not-for-profit, multi-stakeholder organization that monitors and provides public information on air quality, as well as develops recommendations regarding air quality management and monitoring. In addition, ACA facilitates dialogue among the community, industry and government for managing air quality within an area that parallels the Edmonton Census Metropolitan Area (between the West Central Airshed Society to the west and the Fort Air Partnership to the northeast) -see *Table 1 Monitoring Locations* .

The intent of the ACA Monitoring plan is to provide an Airshed model (multi-stakeholder, consensus decision making) to oversee monitoring in the Capital Region.

1. The first step has been to consolidate the data from the various sources of ambient air quality data – SIA, AESRD and Lehigh, and stream the data on the ACA website for the public to access.
2. Adequate air quality data is essential to inform air quality management and where there are gaps, the ACA will work with its members to explore opportunities for additional monitoring.
3. The ACA is developing its capacity to serve as a facilitator of stakeholder engagement in order to develop strategies and actions to manage air quality.
4. The ACA provides education to the public and its members on issues related to air quality in order to encourage more effective engagement.

1.1 Boundaries

- The Airshed Boundaries are described as follows:
- East from Edmonton along Highway 16 to the eastern boundary of Strathcona County
- South along Strathcona County Line to Leduc County
- South along Leduc County line to southern limit
- West along Leduc County Line to Highway 795 (this is the West Central Airshed Boundary)
- North along Highway 795 to intersection of Highway 39
- Directly north of Highway 39 to Highway 627
- West along Highway 627 to intersection of Highway 777
- North to connect Highway 777 and continue north to Northern edge of Lac Ste. Ann County
- East along County Line to Sturgeon County
- East along Sturgeon County Line to northern extension of Edmonton 97 St (Highway 28) (this is Fort Air Partnership Boundary)
- South to Edmonton city limit
- Clockwise around city to Highway 16

1.2 Monitoring Objective(s)

The Capital Airshed acknowledges that the monitoring plan articulated here is for the purpose of managing the existing complement of air monitoring stations in their current locations. It is the first step of an ongoing process that will use science based evidence, monitoring data and community concerns. Subsequent phases of the program will include a thorough review of the existing network to ensure that the monitoring plan and its component parts are consistent with that which may be required to meet the objectives articulated above. The plan should be regarded as a living document that may require change (i.e. number of air monitoring stations, their location and parameters monitored) to fulfill the airsheds obligations to its partners and the community.

Objectives will include:

- Establish regulatory compliance
- Support ambient air monitoring strategy for Alberta, CCME's CWS for PM2.5 and Ozone and other strategies and frameworks
- To support the National Air Pollution Surveillance (NAPS) network
- Understand spatial distribution of pollutants in the region
- Identify regional air quality trends
- Provide information for evaluating population exposure to ambient air quality
- Provide information to understand air quality impacts on the health of the environment
- Provide suitable input and valid information for air quality models

1.3 List of Contributions to the Monitoring Plan

Name	Affiliation
Jeff Yanew	City of St. Albert
Jocelyn Thrasher-Haug	Strathcona County
Brent Korobanik	Lehigh Cement
Sean MacGregor	Strathcona Industrial Association
Shelley Morris	ESRD
Alex MacKenzie	Public Member
Gary Redmond	Alberta Capital Airshed
Brenda Barber	Alberta Capital Airshed

2.0 MONITORING INFORMATION

2.1 Monitoring Location(s)

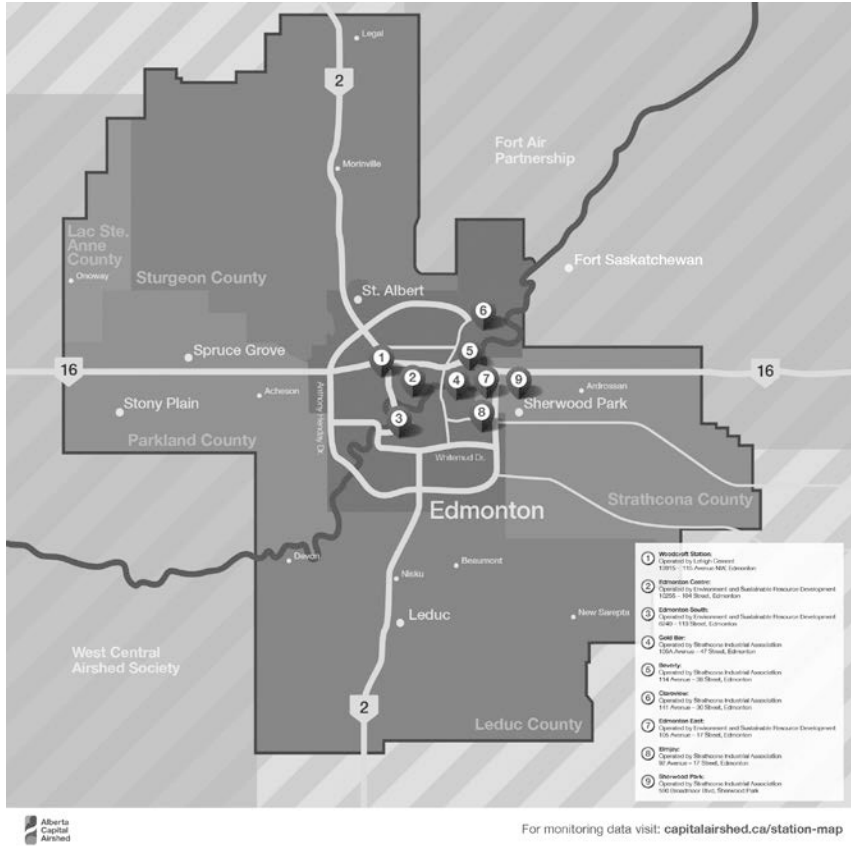


Table 1 List of monitoring locations

Site No./Name	Longitude	Latitude	Who operates?	Who owns?	Land Use	Cont/Interm
Woodcroft	53.564411	-113.562583	Lehigh Cement	Lehigh Cement	Residential	Continuous
Edmonton Centre	53.544436	-113.498761	ESRD	ESRD	Commercial	Continuous
Edmonton South	53.500058	-113.526047	ESRD	ESRD	Residential	Continuous
Gold Bar	53 32 57.3" N	113 24 53.03 W	SIA	SIA	Residential	Continuous
Beverly	53 34 00.96 N	113 23 54.55 W	SIA	SIA	Residential	Continuous
Clareview	53 36 10.03 N	113 23 13.40 W	SIA	SIA	Residential	Continuous
Edmonton East	53.548211	-113.368086	ESRD	ESRD	Industrial	Continuous
Elmjay	53 31 36.36 N	113 21 56.69 W	SIA	SIA	Industrial	Continuous
Sherwood Park	53 31 55.53 N	113 19 15.54 W	SIA	SIA	Residential	Continuous

The SIA, Lehigh and ESRD stations are pre-existing sites to the ACA, that were previously approved by ESRD as part of regulatory compliance. Any historical data and/or information with respect to the rationale for location of the monitoring stations, the substances monitored or the primary monitoring objective of the stations should be on historical record with ESRD.

Table 2 List of Substances Monitored

Pollutant	Sherwood Park	Gold Bar	Beverly	Elmjay	Wood-croft	Edmonton Central	Edmonton East	Edmonton South	Edmonton McIntyre
SO ₂	✓	✓	✓	✓	✓	-	✓	✓	-
H ₂ S	✓	✓	✓	✓	-	-	✓	-	-
NO	✓	✓	-	-	✓	✓	✓	✓	-
NO ₂	✓	✓	-	-	✓	✓	✓	✓	-
NO _x	✓	✓	-	-	✓	✓	✓	✓	-
O ₃	-	-	-	-	-	✓	✓	✓	-
CO	-	-	-	-	-	✓	✓	✓	-
THC	✓	-	✓	-	-	✓	✓	✓	-
CH ₄	-	-	-	-	-	✓	✓	-	-
NMHC	-	-	-	-	-	✓	✓	-	-
PM _{2.5}	-	-	-	-	✓	✓	✓	✓	✓
PM ₁₀	-	-	-	-	-	-	-	✓	-

- No limitations of access for stations owned and operated by SIA, stations are accessed by management.
- No limitations of access for stations owned and operated by Lehigh Cement, stations are accessed by management.
- No limitations of access for stations owned and operated by ESRD, stations are accessed by management.

Table 3 Method of Monitoring

Station Name	Monitoring/Instrumentation Method	Detection Limit	Full Scale	Precision	Accuracy	Sampling Frequency	Sampling Duration (average duration)
Sherwood Park	SO2 TEI Model 43C	1 ppb	500ppb	1 ppb or 1% reading	±1% full scale	1 second	1 minute
	THC TEI Model 51C-LT	0.05 ppm	50ppm	2 % of reading or ±0.1 ppm	2 % of reading or ± 0.1 ppm	1 second	1 minute
	NO _x TEI Model 42C	0.4 ppb	1000ppb	±0.4 ppb	±1% full scale	1 second	1 minute

	H2S TEI Model 450I	2 ppb	100ppb	1 ppb or 1% reading	±1% full scale	1 second	1 minute
	Wind Speed Met One Ultrasonic 50.5	0.1 m/s	50 m/s	0.1 m/s	±0.2 m/s < 11.3 m/s or ±2 % > 11.3 m/s	1 second	1 minute
	Wind direction Met One Ultrasonic 50.5	0 deg	0 to 360 deg	1 deg	±3 deg	1 second	1 minute
	Temperature Met One	-50C	50C	0.1C	±0.1C	1 second	1 minute

Station Name	Monitoring/Instrumentation Method	Detection Limit	Full Scale	Precision	Accuracy	Sampling Frequency	Sampling Duration (average duration)
Gold Bar	SO2 TEI Model 43A	1 ppb	100ppb	1 ppb or 1% reading	±1% full scale	1 second	1 minute
	NOx TEI Model 42C	0.4 ppb	1000ppb	0.1 m/sec	±1% full scale	1 second	1 minute
	H2S TEI Model 450I	2 ppb	100ppb	1 ppb or 1% reading	±1% full scale	1 second	1 minute
	Wind Speed Met One Ultrasonic 50.5	0.1 m/s	50 m/s	0.1 m/s	±0.2 m/s < 11.3 m/s or ±2 % > 11.3 m/s	1 second	1 minute
	Wind direction Met One Ultrasonic 50.5	0 deg	0 to 360 deg	1 deg	±3 deg	1 second	1 minute
	Temperature Met One	-50C	50C	0.1C	±0.1C	1 second	1 minute

Station Name	Monitoring/Instrumentation Method	Detection Limit	Full Scale	Precision	Accuracy	Sampling Frequency	Sampling Duration (average duration)
Elmjay	SO2 TEI Model 43C	1 ppb	500ppb	1 ppb or 1% reading	±1% full scale	1 second	1 minute
	H2S TEI Model 43A	1 ppb	100ppb	1 ppb or 1% reading	±1% full scale	1 second	1 minute
	Wind Speed Met One Ultrasonic 50.5	0.1 m/s	50 m/s	0.1 m/s	±0.2 m/s < 11.3 m/s or ±2 % > 11.3 m/s	1 second	1 minute
	Wind direction Met One Ultrasonic 50.5	0 deg	0 to 360 deg	1 deg	±3 deg	1 second	1 minute
	Temperature Met One	-50C	50C	0.1C	±0.1C	1 second	1 minute

Station Name	Monitoring/Instrumentation Method	Detection Limit	Full Scale	Precision	Accuracy	Sampling Frequency	Sampling Duration (average duration)
Beverly	SO2 TEI Model 43A	1 ppb	100ppb	1 ppb or 1% reading	±1% full scale	1 second	1 minute
	THC TEI Model 51C-LT	0.05 ppm	50ppm	2 % of reading or ± 0.1 ppm	2 % of reading or ± 0.1 ppm	1 second	1 minute
	H2S TEI Model 43C	1 ppb	500ppb	1 ppb or 1% reading	±1% full scale	1 second	1 minute
	Wind Speed Met One Ultrasonic 50.5	0.1 m/s	50 m/s	0.1 m/s	±0.2 m/s < 11.3 m/s or ±2 % > 11.3 m/s	1 second	1 minute
	Wind direction Met One Ultrasonic 50.5	0 deg	0 to 360 deg	1 deg	±3 deg	1 second	1 minute
	Temperature Met One	-50C	50C	0.1C	0.1C	1 second	1 minute

Station Name	Monitoring/Instrumentation Method	Detection Limit	Full Scale	Precision	Accuracy	Sampling Frequency	Sampling Duration (average duration)
Clareview	Wind Speed Met One Ultrasonic 50.5	0.1 m/s	50 m/s	0.1 m/s	±0.2 m/s < 11.3 m/s or ±2 % > 11.3 m/s	1 second	1 minute
	Wind direction Met One Ultrasonic 50.5	0 deg	0 to 360 deg	1 deg	±3 deg	1 second	1 minute
	Temperature Met One	-50C	50C	0.1C	±0.1C	1 second	1 minute

Station Name	Monitoring/Instrumentation Method	Detection Limit	Full Scale	Precision	Accuracy	Sampling Frequency	Sampling Duration (average duration)
Woodcroft	SO2 TEI Model 43C	1 ppb	500ppb	1 ppb or 1% reading	±1% full scale	1 second	1 minute
	O3 TEI Model 49I	1 ppb	500ppb	1 ppb	±1% full scale	1 second	1 minute
	NOx TEI Model 42C	0.4 ppb	1000ppb	±0.4 ppb	±1% full scale	1 second	1 minute
	PM2.5 R&P TEOM 1400AB	0.06 ug/m3	5x10 ⁶ ug/m3	±1.5 ug/m3 (1-hr average)	±0.75% measurement	1 second	1 minute
	Wind Speed RM Young 5305	0.4 m/s	50 m/s	0.1 m/s	±0.2 m/s	1 second	1 minute

	Wind direction RM Young 5305	0 deg	0 to 360 deg	1 deg	±3 deg	1 second	1 minute
	Temperature Campbell Scientific HMP 45C	-39.2C	60C	0.1C	±0.2 to ±0.5C by temperature	1 second	1 minute
	Relative Humidity Campbell Scientific HMP 45C	0.8%	100%	1%	±2% (0 to 90% RH) ±3% (90 to 100% RH)	1 second	1 minute
Intermittent Sampling							
	TSP R&P Partisol 2000	Dependent on analytical equipment/lab				6 days	24 hours
	PM10 R&P Partisol 2000	Dependent on analytical equipment/lab				6 days	24 hours
	PM2.5 R&P Partisol 2000	Dependent on analytical equipment/lab				6 days	24 hours

Station Name	Parameter	Instrumentation Make Model/ Method of Detection	Detection Limit	Full Scale	Precision	Sampling Frequency	Sampling Duration
Edmonton Central	CO	Thermo 48CTL/ Gas filter correlation	0.04 ppm	0-50 ppm	0.04 ppm	Continuous	Long Term
	O3	Thermo 49i/ Ultraviolet photometric	0.50ppb	0-1 ppm	1.0 ppb	Continuous	Long Term
	NO-NO ₂ -NO _x	Thermo 42i/ Chemiluminescent	0.40 ppb	0-1 ppm	0.4 ppb	Continuous	Long Term
	PM2.5	R&P 1400/8500/ TEOM-FDMS		450 ug/m3	0.2 ug/m3	Continuous	Long Term
	Methane/Nonmethane Hydrocarbons/ Total Hydrocarbons	Thermo 55C/ Flame Ionization Detection	20 ppb methane 50 ppb NMHC	20/20/40ppm	50 ppb	Continuous	Long Term

Station Name	Parameter	Instrumentation Make Model/ Method of Detection	Detection Limit	Full Scale	Precision	Sampling Frequency	Sampling Duration
Edmonton South	CO	Thermo 48CTL/ Gas filter correlation	0.04 ppm	0-50 ppm	0.04 ppm	Continuous	Long Term
	O3	Thermo 49i/ Ultraviolet photometric	0.50ppb	0-1 ppm	1.0 ppb	Continuous	Long Term
	NO-NO ₂ -NO _x	Thermo 42i/ Chemiluminescent	0.40 ppb	0-1 ppm	0.4 ppb	Continuous	Long Term
	PM2.5	R&P 1400/8500/ TEOM-FDMS	0.2 ug/m3	450 ug/m3	0.2 ug/m3	Continuous	Long Term
	SO2	Thermo 43i / Pulsed	0.5ppb	0-1 ppm	1 ppb	Continuous	Long Term

		Fluorescence					
	Total Hydrocarbons	Thermo 51C/ Flame Ionization Detection	50 ppb	50ppm	50 ppb	Continuous	Long Term
	Wind Speed/ Wind Direction	Met One 50.5H Ultrasonic	0.9 km/hr	180 km/hr 0-360°		Continuous	Long Term
	Temperature/Relative Humidity	Met One	-50°C - +50°C			Continuous	Long Term

Station Name	Parameter	Instrumentation Make Model/ Method of Detection	Detection Limit	Full Scale	Precision	Sampling Frequency	Sampling Duration
Edmonton East	CO	Thermo 48CTL/ Gas filter coorelation	0.04 ppm	0-50 ppm	0.04 ppm	Continuous	Long Term
	O3	Thermo 49i/ Ultraviolet photometric	0.50ppb	0-1 ppm	1.0 ppb	Continuous	Long Term
	NO-NO ₂ -NO _x	Thermo 42i/ Chemiluminescent	0.40 ppb	0-1 ppm	0.4 ppb	Continuous	Long Term
	PM2.5	R&P 1400/8500/ TEOM-FDMS	0.2 ug/m3	450 ug/m3	0.2 ug/m3	Continuous	Long Term
	SO2	Thermo 43i / Pulsed Fluorescence	0.5ppb	0-1 ppm	1 ppb	Continuous	Long Term
	H2S	Thermo 43i / Pulsed Fluorescence	0.5ppb	0-1 ppm	1 ppb	Continuous	Long Term
	Methane/Nonmethane Hydrocarbons/ Total Hydrocarbons	Thermo 55i/ Flame Ionization Detection	20 ppb methane 50 ppb NMHC	20/20/40ppm	50 ppb	Continuous	Long Term
	Wind Speed/ Wind Direction	Met One 50.5H Ultrasonic	0.9 km/hr	180 km/hr 0-360°		Continuous	Long Term
	Temperature/Relative Humidity	Met One	-50°C - +50°C			Continuous	Long Term

2.2 Rationale for Monitoring Methods Used

The monitoring methods used by ACA and its members follow the methods established by Alberta Environment and Sustainable Resource Development (ESRD) in the Alberta Monitoring Directive (AMD 2006), which outlines the monitoring and reporting required by the Alberta Environmental Protection and Enhancement Act (EPEA)

Given that it is essential that environmental data submitted to ESRD is consistent, of high quality, and defensible, the AMD outlines the methods for air monitoring and reporting, as required by an Alberta Environmental Protection and Enhancement Act (EPEA) approval, Code of Practice, Registration, or any other air monitoring and reporting activities for which data is submitted to Alberta Environment (AENV), or any other person acting on its behalf.

3.0 EMISSIONS AND RECEPTORS

3.1 Emission(s) Sources

The historical and current resources used by ACA include the following:

- [The Capital Region Air Quality Management Framework](#)
- STI Report

3.2 Receptors

Sensitive receptors include, but are not limited to, hospitals, schools, daycare facilities, elderly housing and convalescent facilities of which all are present in the Alberta capital region. These are areas where the occupants are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, and other pollutants. Extra care must be taken when dealing with contaminants and pollutants in close proximity to areas recognized as sensitive receptors. Soils and aquatic systems are primary receptors of acid deposition. Sensitivity of these systems are dependent on the type and composition of these systems.

4.0 DATA MANAGEMENT

4.1 Data Archive

The following types of documentation and records will be used in the program:

- Field documentation, including field log and laboratory sheets, daily summaries, equipment audit results, calibration results, quality control checks, and records of procedures and maintenance performed. These documents will be maintained and stored by Contractor for a period of 10 years. (after which time, a backup will be provided to ACA)
- Ambient data (raw and validated) will reside on Contractor database for the life of the program. Validated data will be submitted monthly to the Alberta Environment database within the following 30 days of months end in accordance with the AMD (CASA Warehouse). – Live data will be streamed to ACA website (Not QA/QC)
- The real time hourly data will be streamed to AESRD for stations that are designated as AQHI stations
- Lab analysis reports, QC checks, problems and corrective actions/resolved, the QAP and QAP revisions, QA audit reports, final reports will be archived on Contractor database. An electronic copy of the report will also be provided to the EC Chair and Executive Director.

4.2 Compliance Reporting

When nonconformities occur as a result of data validation, independent audit reports, or as a result of malfunction, the event details are communicated to the Executive Director (or designate) and TWG Chair (or designate) by the Network Manager for Contractor.

- Exceedances of the AAAQOs are reported as soon as they are known to the Network Manager who immediately calls the ESRD's hotline (780-422-4505) to report the event, and if required receives an Incident Reference Number. Further details are gathered within the ACA network by the Network Manager regarding the event and a nonconformance report is issued to the ACA TWG Chair and then a 7-day follow-up letter is issued Alberta Environment within 7 days of the event's occurrence. An electronic copy of the report is archived by Contractor. Corrective actions dealing with a nonconformance issue are documented in the (consistent with monitoring plan).
- Instrument operational time below 90% in a month is reported to ESRD.

4.3 Data Collection

All data are captured onsite in one-minute and hourly-average increments by the server and are then disseminated to all parties with authority to access the data. The data system collects all data on the data server where the suite of programs reside in order to review air quality data to verify operations of air quality monitoring site within the network. The complete software system has supplemental programs that help ensure high quality network operations and data by performing the following functions:

- Allow the operator to review current and recent past air quality data; guide the operator through calibration, maintenance, operation, troubleshooting procedures, and serves as the primary on-site quality assurance documentation archive
- Facilitate flagging of data for reasons identified from the field technicians, or recorded functions
- Facilitate baseline correction of continuous ambient air quality data
- Facilitate generation of monthly dashboard reports for Members Facilitate generation of monthly reports for submission
- Facilitate generation of the data in an acceptable format for submission to the CASA data warehouse (if required)
- Facilitate generation of real-time hourly average data in an acceptable format for submission to AESRD or Environment Canada (if required)

4.4 Public Reporting

Reporting of data collected by the monitoring program is accomplished by live data streaming to the ACA website. Data streamed to the website has not been verified as accurate through a quality assurance process.

4.5 CASA Data Warehouse

Once the data collected by the ACA Air Quality Monitoring program has been processed by the data validation system, it is converted into xml format and transmitted electronically to the Alberta Ambient Air Data Management System (AAADMS), or more commonly, the CASA Data Warehouse) (www.casadata.org).

4.6 Quality Assurance and Quality Control (QA/QC)

The quality assurance and quality control of the data collected through the air monitoring program consists of a system of procedures designed to validate continuous data collected. This process is documented in the ACA Quality Assurance Plan (QAP) written in compliance with the Air Monitoring Directive (AMD-2006) requirements. This process produces valid final data from the raw data collected in the field following current accepted practices by US EPA and other agencies. The main steps of QA/QC, data validation and data management include:

- Automatic daily zero and span calibration check of all gas analyzers
- Daily review of data and evaluation of the zero and span calibration check results of from each analyzer. Data is reviewed for anomalies and investigated as necessary.
- Monthly multipoint calibration of each analyzer are performed, documented and submitted to AESRD on a monthly basis.
- Review and understanding of measurement system capabilities, performance, and status,
- Verification of air quality monitor calibration procedures and results,
- Summary and review of data values (tabular, statistical, and/or graphical),
- Identification and investigation of episodes of potentially invalid data are documented,
- Flagging of invalid data,
- Systematic validation of data values, including calculation of ambient air pollutant concentrations by baseline correction of raw ambient data values,
- Summary and documentation of events discovered, investigations, and corrective actions taken,

- Operationally oriented feedback to technologists operating monitoring equipment,
- AESRD audits each analyzer on an annual basis in accordance to the air Monitoring Directive to verify the performance of the monitoring equipment and program.
- Archiving data,
- Formatting data into routine reports and formatting data into files for dissemination,
- Reporting to the organization.

4.7 Contractor Roles

- Network Manager – is the primary point of contact between the ACA TWG Chair and Primary Contractor.
- The Network Manager is responsible for all contracting activities, and for all project technical and fiscal reporting, the coordinating field activities; semi-annual site audit, maintenance, and calibration visits; field service visits; any necessary remedial repairs; and verifying all calibration standards.
- Information Manager – is responsible for management and direction of all data collection, reduction, validation, archiving, and reporting activities.
- Quality Assurance Coordinator – is responsible for air monitoring procedures and training; quality assurance policies, plans, and procedures; data validation and data quality assessment and report.
- Data Specialists - is responsible for daily data retrieval activities; identification and communication of operational problems to the technical manager; data validation, data archive, and data reporting.
- Technical Services Supervisor - is responsible for technical assistance for station installation, operation, and maintenance; calibration and quality control standards; air monitoring equipment evaluation, procurement and acceptance testing; air monitoring equipment calibration; parts and inventory control; and major equipment repair.
- Air Monitoring Field Specialists – are responsible for daily review of the network operations, site audit, maintenance, and calibration visits, troubleshooting activities, performing and managing all equipment repairs, calibrations, and preventative maintenance.
- Additional technical and administrative support personnel may be used as necessary upon direction of the Program Manager.

4.8 Future Goals

Alberta Capital Airshed will take over the management of the ESRD stations, Edmonton Centre and Edmonton South by end of 2013-14.

Future consideration of new monitoring sites will adhere to the AMD.

5.0 IMPLEMENTATION

5.1 Implementation Timeline

- Submit to ACA Board of Directors for approval - September 25, 2013
- Submit Monitoring Plan to ESRD for approval - September, 2013
- Request for Proposal
- Contract with ESRD
- Contract with Contractor
- Equipment installation and testing
- Data collection
- All other milestones and completion dates

6.0 CONTINGENCY PLANNING

6.1 Monitoring site security, theft

The Contractor is responsible to ensure that all stations/sites are secure to minimize the potential for harmful vandalism that may invalidate the environmental monitoring results. Station doors are locked at all times to prevent unlawful of entry into the station. In addition to the locked trailer, if instrumentation is removed from the station, the contractor will receive an analyzer failure alarm and will trigger a response from the on-call respondent.

6.2 Contract disruption

In the event of contract disruption or transfer of ownership of the record maintenance contract, the contractor will provide all electronic files and hardcopy documents to the TWG Chair immediately following the termination of the employment contract.

6.3 Power failure, communication failure, etc.

In the event of a station power or communication failure the contractor's computer system requires a comprehensive protection system with levels of security to protect against external and internal attacks.

In the event of a network file server failure each monitoring system at each trailer will have the ability to download data on to a portable hard drive or flash card. This replication of data storage will ensure that if the data logger at a site fails, data will not be irretrievably lost.

INFORMATION SHEET

ITEM: 5.1 **2013 Annual Communications Committee Report**

ISSUE: Each year, the Board is provided information with respect to CASA Communications achievements and performance in 2013.

STATUS: At the Dec 9, 2013 meeting, the Communications Committee completed a review of communications activities in 2013 and are ready to provide the Board with a summary of significant achievements.

***ATTACHMENTS
TO FOLLOW:*** None. A presentation will be provided at the Board meeting.

PLACEHOLDER

ITEM: **6.1 New/Other Business**

ISSUE: At the time of printing there was no other new business.

**CASA Board of Directors
Mailing List**

Member Representative	Alternate	Sector
Brian Ahearn , Vice President – Western Division Canadian Fuels Association 2100, 350 – 7th Avenue SW Calgary Alberta T2P 3N9 Bus: (403) 266-7565 brianahearn@canadianfuels.ca	Peter Noble Imperial Oil PO Box 2480, Station M Calgary, Alberta T2P 3M9 Bus: (403) 237-4144 Fax: (403) 237-2075 Peter.c.noble@esso.ca	Petroleum Products
Leigh Allard President & CEO The Lung Association, AB & NWT P.O.Box 4500, Stn South Edmonton, AB T6E 6K2 1-888-566-5864 x 2241 Fax: (780) 488-7195 lallard@ab.lung.ca	Janis Seville Director of Health Initiatives The Lung Association, AB & NWT P.O.Box 4500, Stn South Edmonton, AB T6E 6K2 1-888-566-5864 x 2234 Fax: (780) 488-7195 jseville@ab.lung.ca	NGO Health
Ann Baran Southern Alberta Group for the Environment Box 243 Turin, AB T0K 2H0 Bus: (403) 738-4657 couleesedge1@hotmail.com	Vacant	NGO Rural
Rob Beleutz , Environmental, Health and Safety Manager Graymont Western Canada Inc. 200, 10991 Shellbridge Way Richmond, BC V6X 3C6 Bus: (604) 249-1911 rbeleutz@graymont.com	Dan Thillman , Plant Manager Lehigh Cement 12640 Inland Way Edmonton, AB T5V 1K2 Bus: (780) 420-2691, Fax: (780) 420-2528 dthillman@lehighcement.com	Mining
Christine Best , Acting Associate Regional Director General Environment Canada Room 200, 4999 – 98 Avenue Edmonton, Alberta T6B 2X3 Bus: (780) 951-8687 Fax: (780) 495-3086 Christine.best@ec.gc.ca	Martin Van Olst , Senior Analyst Regional Analysis and Relationships Environment Canada Room 200, 4999 – 98 Avenue Edmonton, Alberta T6B 2X3 Bus: (780) 951-8958 Fax: (780) 495-3086 Martin.vanOlst@ec.gc.ca	Federal Government
Martin Chamberlain , Assistant Deputy Minister Resource Development Policy Division Alberta Energy 8th fl Petroleum Plaza NT 9945 - 108 Street Edmonton, AB T5K 2G6 Bus: (780) 422-1045, Fax (780) 427-7737 Martin.chamberlain@gov.ab.ca	Audrey Murray , Branch Head Environment and Resource Services Alberta Energy 12th Floor, Petroleum Plaza North Tower 9945 - 108 Street Edmonton, AB T5K 2G6 Bus: (780) 427-6383, Fax (780) 422-3044 Audrey.murray@gov.ab.ca	Provincial Government - Energy
Claude Chamberland , President Canadian Association of Petroleum Producers c/o Chamberland Consulting Ltd. #226, 30 Cranfield Link S.E. Calgary, AB T3M 0C4 Cell: (403) 824-6478; Fax (403) 261-4622 claudech@telus.net	Elise Bieche , Manager Natural Air Issues Canadian Association of Petroleum Producers 2100, 350-7th Ave SW Calgary, AB T2P 3N9 Bus: (403) 776-1412, Fax: (403) 542-3898 Elise.bieche@capp.ca	Oil & Gas – large producers
Brian Gilliland , Manager, Environmental Affairs, Canada Weyerhaeuser Co. Ltd. 201, 2920 Calgary Trail Edmonton, Alberta T6J 2G8 Bus: (780) 733-4205, Fax: (780) 733-4238 brian.gilliland@weyerhaeuser.com	Keith Murray , Director, Forestry & Environment Alberta Forest Products Association 900, 10707 100 Ave. Edmonton, AB T5J 3M1 Bus: (780) 392-0756, Fax: (780) 455-0505 kmurray@albertaforestproducts.ca	Forestry
David Lawlor , Director, Environmental Affairs ENMAX 141 50th Avenue SE Calgary, Alberta T2G 4S7 Bus: (403) 514.3296, Fax: (403) 514.6844	Vacant	Alternate Energy

Member Representative	Alternate	Sector
dlawlor@enmax.com		
Holly Johnson Rattlesnake Samson Cree Nation PO Box 159 Hobema, AB T0C 1N0 Bus: (780) 585-3793 ext. 291, Fax: (780) 585-2256 hjrattlesnake@gmail.com	Vacant	Aboriginal Government - First Nations
Carolyn Kolebaba , Vice President Alberta Association of Municipal Districts & Counties Box 178 Nampa, AB T0H 2R0 Bus: (780) 955-4076 Fax: (780) 955-3615 ckolebaba@aamdc.com	Tom Burton , Director Alberta Association of Municipal Districts & Counties Box 419 DeBolt, AB T0H 1B0 Bus: (780) 955.4076, Fax: (780) 955.3615 Cell: (780) 512-1558 tburton@aamdc.com	Local Government - Rural
Yolanta Leszczynski , P.Eng SD/ Env Regulatory Coordinator Shell Scotford Manufacturing PO Bag 22 Fort Saskatchewan, AB T8L 3T2 Bus : (780) 992-3972 Yolanta.Leszczynski@shell.com	Al Schulz , Regional Director Chemistry Industry Association of Canada 97-53017, Range Road 223 Ardrossan, Alberta T8E 2M3 Bus: (780) 922-5902, Fax: (780)-922-0354 alschulz@telusplanet.net	Chemical Manufacturers
Linda Mattern , Assistant Deputy Minister Acute Care & Population Health Division Alberta Health 24 th Floor, Telus Plaza NT 10025 Jasper Avenue Edmonton, AB T5J 1S6 Bus: (780) 422-2720 linda.mattern@gov.ab.ca	Dawn Friesen , Executive Director Health Protection Alberta Health 23rd fl Telus Plaza NT 10025 Jasper Avenue Edmonton, AB T5J 1S6 Bus: (780) 415-2818, Fax: (780) 427-1470 dawn.friesen@gov.ab.ca	Provincial Government - Health
Mary Onukem , Environmental Coordinator Métis Settlements General Council Suite 101, 10335-172 Street Edmonton, AB T5S 1K9 Bus: (780) 822-4075, 1(888) 213-4400 monukem@msgc.ca	Vacant	Aboriginal Government - Metis
Chris Severson-Baker , Managing Director Pembina Institute Suite 200, 608 - 7th Street SW Calgary, Alberta T2P 1Z2 Bus: (403) 269-3344 ext. 101, Fax: (403) 269-3377 chrisb@pembina.org	Ruth Yanor Mewassin Community Council RR 1 Duffield, AB T0E 0N0 Bus : (780) 504-5056 ruth.yanor@gmail.com	NGO Industrial
David Spink , Environmental Sciences and Policy Consultant Prairie Acid Rain Coalition 62 Lucerne Crescent St. Albert, AB T8N 2R2 Bus: (780) 458-3362, Fax: (780) 419-3361 dspink@shaw.ca	Bill Calder Prairie Acid Rain Coalition 139 Calico Drive Sherwood Park, AB T8A 5P8 Bus: (780) 464-9996 bacalder@telusplanet.net; bacalder@icloud.com	NGO Urban
Rich Smith , Executive Director Alberta Beef Producers 165, 5815 - 8th Street NE Calgary, AB T2E 7H7 Bus: (403) 451-1183, Fax: (403) 274-0007 richs@albertabeef.org	Humphrey Banack Alberta Federation of Agriculture RR #2 Camrose, AB T4V 2N1 Bus: (780) 672-6068 Fax: (780)679-2587 gumbo_hills@hotmail.com	Agriculture
Don Szarko , Director Advocacy and Community Services Alberta Motor Association Box 8180, Station South Edmonton, AB T6J 6R7 Bus: (780) 430-5733, Fax: (780) 430-4861	Scott Wilson , Senior Policy Analyst Advocacy and Community Services Alberta Motor Association Box 8180, Station South Edmonton, AB T6J 6R7 Bus: (780) 430-5523 Fax: (780) 430-4861	Consumer/Transportation

Member Representative	Alternate	Sector
don.szarko@ama.ab.ca	scott.wilson@ama.ab.ca	

<p>Don Wharton, Vice President Sustainable Development TransAlta Corporation 110 - 12th Avenue SW P.O. Box 1900, Station M Calgary, Alberta T2P 2M1 Bus: (403) 267-7681, Fax: (403) 267-7372 don_wharton@transalta.com</p>	<p>Jim Hackett, Director, Aboriginal Relations, Health & Safety, Environment ATCO Group, Utilities 1000, 909 - 11 Avenue S.W. Calgary, AB T2R 1N6 Bus: (403) 245-7408, Fax: (403) 245-7265 jim.hackett@atcopower.com</p>	Utilities
<p>Tim Whitford, Councillor Town of High River Alberta Urban Municipalities Association 435 Riverside Green NW High River, AB T1V 2B6 Bus: (403) 336-1137 tfwhit@telus.net</p>	Vacant	Local Government – Urban
<p>Dana Woodworth, Deputy Minister Alberta Environment & Sustainable Resource Development 11th fl Petroleum Plaza ST 9915 - 108 Street Edmonton, AB T5K 2G8 Bus: (780) 427-1799 Fax (780) 415-9669 dana.woodworth@gov.ab.ca</p>	<p>Rick Blackwood, Assistant Deputy Minister Alberta Environment & Sustainable Resource Development 11th Floor, South Petroleum Plaza 9915 - 108 Street Edmonton, Alberta T5K 2G8 Bus: (780) 427-1139, Fax: (780) 427-8884 rick.blackwood@gov.ab.ca</p>	Provincial Government - Environment
<p>Norman MacLeod, Executive Director Clean Air Strategic Alliance 10th Floor, Centre West 10035-108 Street Edmonton, Alberta T5J 3E1 Bus: (780) 427-9193, Fax: (780) 422-1039 nmacleod@casahome.org</p>		
Vacant	Vacant	Oil & Gas – small producers

Board Members Electronic Version Only:

Brian Ahearn
Dawn Friesen
Jim Hackett
Chris Severson-Baker
Don Szarko
Martin Van Olst
Tim Whitford

**Clean Air Strategic Alliance
List of Stakeholder Groups and Representatives**

Stakeholder Group	Sector	Member	CASA Board Representative	
			Director, Association/Affiliation	Alternate Director, Association/Affiliation
Industry	Petroleum Products	Canadian Fuels Association (formerly CPPI)	Brian Ahearn , Vice President – Western Division Canadian Fuels Association	Peter Noble Imperial Oil
NGO	NGO Health	The Lung Association - Alberta & NWT	Leigh Allard , President & CEO The Lung Association - Alberta & NWT	Janis Seville , Director of Health Initiatives The Lung Association – Alberta & NWT
NGO	NGO Rural	Southern Alberta Group for the Environment	Ann Baran Southern Alberta Group for the Environment	Vacant
Industry	Mining	Alberta Chamber of Resources	Rob Beleutz , Environmental, Health and Safety Manager Graymont Western Canada Inc.	Dan Thillman , Plant Manager Lehigh Cement
Government	Federal	Environment Canada	Christine Best , Acting Associate Regional Director General	Martin Van Olst , Senior Analyst Environment Canada
Government	Provincial Government – Energy	Alberta Energy	Martin Chamberlain , Assistant Deputy Minister Alberta Energy	Audrey Murray , Branch Head Environment and Resource Services Alberta Energy
Industry	Oil & Gas – Large Producers	Canadian Association of Petroleum Producers	Claude Chamberland , President Canadian Association of Petroleum Producers	Elise Bieche , Manager Canadian Association of Petroleum Producers
Industry	Forestry	Alberta Forest Products Association	Brian Gilliland , Manager Environmental Affairs Canada Weyerhaeuser Co. Ltd.	Keith Murray , Director Environmental Affairs Alberta Forest Products Association
Industry	Alternate Energy		David Lawlor , Director Environmental Affairs ENMAX	Vacant
Aboriginal Government	First Nations	Samson Cree Nation	Holly Johnson Rattlesnake Samson Cree Nation	Vacant
Government	Local Government - Rural	Alberta Association of Municipal Districts & Counties	Carolyn Kolebaba , Vice President Reeve, Northern Sunrise County Alberta Association of Municipal Districts & Counties	Tom Burton , Director District 4, MD of Greenview Alberta Association of Municipal Districts & Counties
Industry	Chemical Manufacturers	Chemistry Industry Association of Canada (CIAC)	Yolanta Leszczynski , SD/ Env Regulatory Coordinator Shell Scotford Manufacturing	Al Schulz , Regional Director Chemistry Industry Association of Canada (CIAC)

**Clean Air Strategic Alliance
List of Stakeholder Groups and Representatives**

Government	Provincial Government – Health	Alberta Health	Linda Mattern , Assistant Deputy Minister Acute Care & Population Health Division Alberta Health	Dawn Friesen , Executive Director Health Protection Alberta Health
Aboriginal Government	Métis	Métis Settlements General Council	Mary Onukem , Environmental Coordinator Métis Settlements General Council	Vacant
NGO	NGO Industrial	Pembina Institute	Chris Severson-Baker , Managing Director Pembina Institute	Ruth Yanor Mewassin Community Council
NGO	NGO Urban	Prairie Acid Rain Coalition	David Spink Prairie Acid Rain Coalition	Bill Calder Prairie Acid Rain Coalition
Industry	Agriculture	Alberta Beef Producers	Rich Smith , Executive Director Alberta Beef Producers	Humphrey Banack Alberta Federation of Agriculture
NGO	Consumer Transportation	Alberta Motor Association	Don Szarko , Director Alberta Motor Association	Scott Wilson , Senior Policy Analyst Alberta Motor Association
Industry	Utilities	TransAlta Corporation	Don Wharton , Vice President Sustainable Development TransAlta Corporation	Jim Hackett , Director, Aboriginal Relations, Health & Safety, Environment ATCO Group, Utilities
Government	Local Government – Urban	Alberta Urban Municipalities Association	Tim Whitford , Councillor Town of High River Alberta Urban Municipalities Association	Vacant
Government	Provincial Government – Environment	Alberta Environment Sustainable Resource Development	Dana Woodworth , Deputy Minister Alberta Environment and Sustainable Resource Development	Rick Blackwood , Assistant Deputy Minister Alberta Environment and Sustainable Resource Development
Industry	Oil & Gas – Small Producers	Vacant	Vacant	Vacant

CASA Project Team and Committee Membership
As of November 19, 2013

Base Case Working Group (EFR)

First Name	Last Name	Organization Name	Title
Oliver	Bussler	TransAlta	Member
Randy	Dobko	Environment & Sustainable Resource Development	Member
Colin	Dumais	ENMAX	Member
Jim	Hackett	ATCO Power Canada Ltd.	Member
Ahmed	Idriss	Capital Power Corporation	Member
Robyn	Jacobsen	Clean Air Strategic Alliance	Project Manager
Tom	Marr-Laing	Pembina Institute	Member
Peter	Moore	Alberta Energy	Member
Anamika	Mukherjee	Cenovus Energy Inc.	Member
Njoroge	Ngure	TransCanada	Member

CASA & AAC Joint Standing Committee

First Name	Last Name	Organization Name	Title
Elise	Bieche	Canadian Association of Petroleum Producers (CAPP)	Member
Rick	Blackwood	Environment & Sustainable Resource Development	Member
Nadine	Blaney	Fort Air Partnership	Alternate
Jill	Bloor	Calgary Region Airshed Zone (CRAZ)	Alternate
Bill	Calder	Prairie Acid Rain Coalition	Alternate
Celeste	Dempster	CASA	Project Manager
Carolyn	Kolebaba	Alberta Association of Municipal Districts & Counties	Member
Norman	MacLeod	CASA	Member
Kevin	Percy	Wood Buffalo Environmental Association	Corresp. Member
Gary	Redmond	Alberta Capital Airshed Alliance	Alternate
Al	Schulz	Chemistry Industry Association of Canada (CIAC)	Member
Bob	Scotten	West Central Airshed Society/Palliser Airshed Zone	Member
Chris	Severson-Baker	Pembina Institute	Member
Kevin	Warren	Parkland Airshed Management Zone	Member
Sharon	Willianen	Environment & Sustainable Resource Development	Observer

CASA Risk Management Committee

First Name	Last Name	Organization Name	Title
Ann	Baran	Southern Alberta Group for the Environment	Member
Elise	Bieche	Canadian Association of Petroleum Producers (CAPP)	Member
Bill	Calder	Prairie Acid Rain Coalition	Member
Robyn	Jacobsen	Clean Air Strategic Alliance	Project Manager
David	Lawlor	ENMAX	Member
Norman	MacLeod	CASA	Member
Al	Schulz	Chemistry Industry Association of Canada (CIAC)	Member
Rich	Smith	Alberta Beef Producers	Member
Lisa	Sadownik	Environment & Sustainable Resource Development	Member

Communications Committee			
First Name	Last Name	Organization Name	Title
Patricia	Adams	Canadian Association of Petroleum Producers	Member
Leigh	Allard	The Lung Association AB & NWT	Chair
Ann	Baran	Southern Alberta Group for the Environment	Member
Bob	Curran	Energy Resources Conservation Board	Corresp. Member
Renee	Hackney	Environment & Sustainable Resource Development	Member
Ogho	Ikhalo	Environment & Sustainable Resource Development	Alternate
Yolanta	Leszczynski	Shell Scotford Manufacturing	Member
Norm	MacLeod	Clean Air Strategic Alliance	Project Manager
Kelly	Morrison	Petroleum Services Association of Canada	Member
Carly	Steiger	Environment & Sustainable Resource Development	Member
Gloria	Trimble	Environment Canada	Corresp. Member
Ruth	Yanor	Mewassin Community Council	Member

Complaints Task Group (OMT)

First Name	Last Name	Organization Name	Title
Ann	Baran	Southern Alberta Group for the Environment	Member
Michael	Bisaga	LICA	Alternate
Roxane	Bretzlaff	Canadian Natural Resources Limited	Member
Celeste	Dempster	CASA	Project Manager
Keith	Denman	Environment & Sustainable Resource Development	Member
Francisco	Echegaray	Natural Resources Conservation Board	Corresp. Member
Christian	Felske	City of Edmonton	Member
Jennifer	Fowler	Hinton Pulp, A Division of West Fraser Ltd	Member
Joseph	Hnatiuk	Canadian Society of Environmental Biologists (CSEB)	Member
Sandi	Jones	Alberta Agriculture and Rural Development	Alternate
Carolyn	Kolebaba	Alberta Association of Municipal Districts & Counties	Member
Jim	Lapp	City of Edmonton	Alternate
Darren	Morissette	Peace Airshed Zone Association (PAZA)	Member
Tanya	Moskal-Hebert	Alberta Agriculture and Rural Development	Member
Ludmilla	Rodriguez	Alberta Health Services	Member
Merry	Turtiak	Alberta Health	Member
Dalene	Wilkins	Alberta Energy Regulator	Member

Control Technologies & Review Strategies 2013 (EFR)

First Name	Last Name	Organization Name	Title
Krista	Brindle	Alberta Energy	Member
Colin	Dumais	ENMAX	Member
Sushmitha	Gollapudi	Environment & Sustainable Resource Development	Member
Jim	Hackett	ATCO Power Canada Ltd.	Member
Ahmed	Idriss	Capital Power Corporation	Member
Robyn	Jacobsen	Clean Air Strategic Alliance	Project Manager
Anamika	Mukherjee	Cenovus Energy Inc.	Member
David	Spink	Prairie Acid Rain Coalition	Member
Wayne	Ungstad	Ponoka Fish and Game	Member

Electricity Framework Review 2013 Project Team			
First Name	Last Name	Organization Name	Title
Brian	Ahearn	Canadian Fuels Association	Corresp. Member
Kristi	Anderson	Mewassin Community Council	Member
Elise	Bieche	Canadian Association of Petroleum Producers (CAPP)	Corresp. Member
Tasha	Blumenthal	AAMDC	Corresp. Member
Krista	Brindle	Alberta Energy	Alternate
Oliver	Bussler	TransAlta	Alternate
Glynis	Carling	Imperial Oil Resources	Alternate
Andre	Chabot	City of Calgary	Member
Rod	Crockford	Encana Corporation	Member
Celeste	Dempster	CASA	Co-Project Manager
Paul	DiJulio	Slave Lake Pulp	Corresp. Member
Randy	Dobko	Environment & Sustainable Resource Development	Member
Steven	Flavel	Alberta Energy	Member
Brian	Gilliland	Weyerhaeuser Company Ltd.	Corresp. Member
Jim	Hackett	ATCO Power Canada Ltd.	Member
Ahmed	Idriss	Capital Power Corporation	Member
Brian	Jackowich	Alberta Urban Municipalities Association (AUMA)	Alternate
Robyn	Jacobsen	Clean Air Strategic Alliance	Project Manager
David	Lawlor	ENMAX	Member
Tom	Marr-Laing	Pembina Institute	Member
Shaun	McNamara	Milner Power Inc.	Member
Lynn	Meyer	Capital Power	Alternate
Anamika	Mukherjee	Cenovus Energy Inc.	Member
Njoroge	Ngure	TransCanada	Alternate
Brian	Norgaard	Alta Gas	Corresp. Member
Marlo	Raynolds	BluEarth Renewables Inc.	Member
Al	Schulz	Chemistry Industry Association of Canada (CIAC)	Member
Kelly	Scott	ATCO Power	Alternate
David	Spink	Prairie Acid Rain Coalition	Member
Leonard	Standing on the Road	Ponoka Fish and Game	Alternate
Ben	Thibault	Pembina Institute	Alternate
Merry	Turtiak	Alberta Health	Corresp. Member
Wayne	Ungstad	Ponoka Fish and Game	Member
Srikanth	Venugopal	TransCanada Transmission	Member
Rob	Watson	Maxim Power	Alternate
Tim	Weis	Pembina Institute	Member
Don	Wharton	TransAlta Corporation	Member
Tim	Whitford	Alberta Urban Municipalities Association (AUMA)	Corresp. Member

Health and Ecological Assessment Task Group (EFR)

First Name	Last Name	Organization Name	Title
Alison	Anaka	ENMAX Corporation	Member
Kristi	Anderson	Mewassin Community Council	Member
Debra	Hopkins	Alberta Environment and Water	Member
Robyn	Jacobsen	Clean Air Strategic Alliance	Project Manager
Merry	Turtiak	Alberta Health	Member

Health Task Group (OMT)			
First Name	Last Name	Organization Name	Title
Irena	Buka	Mother Rosalie Health Services Centre	Corresp. Member
Laurie	Cheperdak	Environment & Sustainable Resource Development	Member
Celeste	Dempster	CASA	Project Manager
Raquel	Feroe	Alberta Environmental Network	Member
Alvaro	Osornio-Vargas	University of Alberta	Member
Cindy	Quintero	Hinton Pulp, A division of West Fraser Mills Ltd.	Member
Bob	Scotten	West Central Airshed Society/Palliser Airshed Zone	Member
Karina	Thomas	Alberta Health	Member
Opel	Vuzi	Health Canada Alberta Region	Member
Human and Animal Health Implementation Team			
First Name	Last Name	Organization Name	Title
Leigh	Allard	The Lung Association AB & NWT	Member
Laurie	Cheperdak	Environment & Sustainable Resource Development	Member
Marilyn	Craig	Alberta Energy Regulator	Member
Dawn	Friesen	Alberta Health	Co-Chair
Long	Fu	Environment & Sustainable Resource Development	Member
Debra	Hopkins	Environment & Sustainable Resource Development	Member
Judy	Huntley	Bert Riggall Environmental Foundation	Member
Robyn	Jacobsen	Clean Air Strategic Alliance	Project Manager
Ila	Johnston	PAMZ Parkland	Member
Joe	Kendall	Alberta Agriculture and Rural Development	Member
Michelle	Riopel	CASA	Co-Project Manager
Jason	Schulz	TransCanda	Member
Al	Schulz	Chemistry Industry Association of Canada (CIAC)	Member
Merry	Turtiak	Alberta Health	Co-Chair
Brenda	Woo	Health Canada	Member
Ruth	Yanor	Mewassin Community Council	Co-Chair
Odour Assessment Task Group			
First Name	Last Name	Organization Name	Title
Atta	Atia	Alberta Agriculture and Rural Development	Alternate
Phyllis	Chui	Environment & Sustainable Resource Development	Member
Celeste	Dempster	CASA	Project Manager
Ike	Edeogu	Alberta Agriculture and Rural Development	Member
Ruth	Mitchell	Alberta Health	Correp. Member
Gerald	Palanca	Alberta Energy Regulator	Member
Michelle	Riopel	CASA	Co-Project Manager
Tracy	Smith	Shell Canada Limited	Member
David	Spink	Prairie Acid Rain Coalition	Member
Abena	Twumasi-Smith	The Wood Buffalo Environmental Association	Member
Kevin	Warren	Parkland Airshed Management Zone	Alternate

Odour Management Team			
First Name	Last Name	Organization Name	Title
Brian	Ahearn	Canadian Fuels Association	Corresp. Member
Humphrey	Banack	Alberta Federation of Agriculture	Co-Chair
Ann	Baran	Southern Alberta Group for the Environment	Member
Roxane	Bretzlaff	Canadian Natural Resources Limited	Member
Celeste	Dempster	CASA	Project Manager
Keith	Denman	Environment & Sustainable Resource Development	Co-Chair
Mandeep	Dhaliwal	Calgary Region Airshed Zone	Corresp. Member
Francisco	Echegaray	Natural Resources Conservation Board	Member
Brian	Gilliland	Weyerhaeuser Company Ltd.	Alternate
Joseph	Hnatiuk	Canadian Society of Environmental Biologists (CSEB)	Member
Holly	Johnson-Rattlesnake	Samson Cree Nation	Member
Sandi	Jones	Alberta Agriculture and Rural Development	Member
Christine	King	Alberta Energy	Corresp. Member
Carolyn	Kolebaba	AAMDC	Member
Ruth	Mitchell	Alberta Health	Member
Tanya	Moskal-Hebert	Alberta Agriculture and Rural Development	Alternate
Gerald	Palanca	Alberta Energy Regulator	Corresp. Member
Gary	Redmond	Alberta Capital Airshed Alliance	Member
Michelle	Riopel	CASA	Co-Project Manager
Steve	Rozee	The City of Lethbridge	Member
Norine	Saddleback	Samson Cree Nation	Alternate
Al	Schulz	Chemistry Industry Association of Canada (CIAC)	Member
Janis	Seville	The Lung Association, AB & NWT	Member
Tracy	Smith	Shell Canada Limited	Member
David	Spink	Prairie Acid Rain Coalition	Co-Chair
Gord	Start	Hinton Pulp, a division of West Fraser Mills Ltd.	Member
Alan	Stuart	Alberta Forest Products Association	Member
Merry	Turtiak	Alberta Health	Alternate
Angella	Vertzaya	The City of Edmonton	Member
Kevin	Warren	Parkland Airshed Management Zone	Member
Operations Steering Committee/Ambient Air Quality			
First Name	Last Name	Organization Name	Title
Michael	Bisaga	LICA & PAZA	Member
Glynis	Carling	Imperial Oil Resources	Member
Tom	Dickson	Alberta Environment	Chair
Shane	Lamden	NOVA Chemicals Corporation	Member
Norman	MacLeod	CASA	Project Manager
Rachel	Mintz	Environment Canada	Member
Keith	Murray	Alberta Forest Products Association	Member
Bob	Myrick	Environment & Sustainable Resource Development	Member
Janine	Ross	Environment & Sustainable Resource Development	Member
Bob	Scotten	West Central Airshed Society/Palliser Airshed Zone	Member
Merry	Turtiak	Alberta Health	Member
Kevin	Warren	Parkland Airshed Management Zone	Member

Performance Measures Committee			
First Name	Last Name	Organization Name	Title
Celeste	Dempster	CASA	Project Manager
Robyn	Jacobsen	Clean Air Strategic Alliance	Co-Project Manager
Martina	Krieger	Environment & Sustainable Resource Development	Member
Keith	Murray	Alberta Forest Products Association	Member
Ruth	Yanor	Mewassin Community Council	Member

