Clean Air Strategic Alliance

The Clean Air Strategic Alliance brings together diverse stakeholder groups to solve air quality problems on a consensus, rather than adversarial, basis. The overarching goal is to develop a comprehensive air quality management system for Alberta.
Vision

The air will be odourless, tasteless, look clear and have no measurable short- or long-term adverse effects on people, animals, or the environment.

Contents

What is CASA? 1
President's message 2
CASA Board of Directors 4
Thank you to past board members 5
Secretariat 5
Highlights in 1999 6
Activities in 1999 7
- Strategic framework 7
- Pollution prevention/ continuous improvement 9
- Sulphur dioxide management target loading 9
- Animal health 10
- Climate change 11
- Particulate matter and ozone 12
- Data issues workshop planning 13
Projects update 14
- Vehicle Emissions Implementation Design Team 14
- Ambient air quality monitoring - Operations Steering Committee 15
- Human Health Project Team 15
Air quality management zones update 16
- Parkland Airshed Management Zone Association 16
- West Central Airshed Society 17
- Wood Buffalo Environmental Association 17
Support for CASA 18
Financial statements 19
- Auditors' report 19
- Balance sheet 20
- Statement of revenue, expenditures and surplus 21
- Statement of cash flow 22
- Notes to the financial statements 23

This document may be cited as:
ISBN 1-896250-06-5
What is CASA?

The Clean Air Strategic Alliance (CASA or the alliance) is a partnership between government, non-government organizations and industry dedicated to achieving its vision of clean air in Alberta. Incorporated as a non-profit society in 1994, CASA has shared responsibility for strategic air quality planning, organizing and coordinating resources, and evaluating results. CASA follows the principles of consensus decision-making, thus ensuring that its recommendations meet the needs and interests of affected stakeholders.

Decision-making

A adherence to the alliance decision-making tool, the comprehensive air quality management system (CAMS), ensures that any issue brought to CASA through a statement of opportunity/concern or as a focus area of the strategic framework is systematically reviewed and assessed.

The CAMS process follows these steps:

- Clear identification of issues,
- Prioritization of current and emerging issues,
- Allocation and coordination of resources,
- Development of action plans, and
- Evaluation of results.

Aireshed zones

A comprehensive air quality management system is needed to address cumulative regional emissions and potential impacts from those emissions. Consequently, a zone approach to managing air emissions in specific regions throughout the province is being established. CASA provides the framework within which zones function. Zone management plans must be consistent with the vision and principles of CASA.

The following three zones currently operating within Alberta are each incorporated under the Alberta Societies Act as non-profit societies:

- Parkland Airshed Management Zone is incorporated as Parkland Airshed Management Zone Association,
- West Central Airshed Zone is incorporated as West Central Airshed Society, and
- Wood Buffalo Airshed Zone is incorporated as Wood Buffalo Environmental Association.

Project teams

The work of the alliance is achieved largely through the work of teams of individuals representing stakeholders who share an interest in a specific issue. The Board of Directors approves the terms of reference for a project team. Project team accountability is to the board while individual participants are accountable to their stakeholder groups. The work of existing alliance project teams is summarized in this annual report.

Funding

The ongoing work of CASA is supported by equal financial contributions from Alberta Resource Development, Alberta Environment and A lberta Health and Wellness. Industry, government and non-government stakeholders provide additional funding and in-kind support for alliance project teams.
As we leave the 20th century, it is clear that the old ways of doing business are no longer sufficient. The challenge is to meet the changing expectations of our stakeholders, including industry, environmental groups, communities and governments. I believe CASA is well positioned to meet this challenge.

Through our strategic planning process, concluded in 1999, we have established a solid foundation from which we can move forward. One of the most debated issues discussed in 1999 was how CASA can promote the principles of pollution prevention and continuous improvement in a meaningful way. Alliance stakeholders will undoubtedly challenge each other on the most appropriate manner to do this, but I am certain that the rewards from our work will be great. I expect that stakeholders will be able to identify common goals and objectives and emerge with an effective plan for governments, industry and non-government organizations to reduce emissions in a more cost-effective manner.

Our strategic planning exercise reminded us that our work continues to be guided by the need to protect human and ecological health. Another key focus area for CASA, socio-economic integration, is an area that we all agree is important for sustainable development, yet one which has been
Developing and applying the tools that allow for improved and integrated decision-making will require a renewed focus.

CASA's existing teams are moving the province proactively into the 21st century. The work undertaken by the Acidifying Emissions Management Implementation Team to manage Alberta's target loads and keep clean areas clean is consistent with our commitment to pollution prevention. We can all be proud of the unique approach for managing acidifying emissions developed by CASA and being implemented by Alberta Environment.

Finally, CASA is still proving itself as a valued institution. The CASA process was used as a basis for Alberta Environment's consultations on Canada-wide standards for particulate matter and ozone. I am often reminded by those involved in this national initiative that Alberta's process was seen as the most effective in securing stakeholder input and coordinated response. As the province establishes Climate Change Central for taking action to reduce greenhouse gas emissions, it has become apparent that CASA plays an important role in providing a linkage between greenhouse gas reduction initiatives and initiatives aimed at other air issues.

It will be particularly important that the alliance stay in touch with the public's expectations around air quality; that we pursue continued improvement in our scientific understanding; and remain abreast of the structural shifts that will be emerging in the new millennium.

In closing, I want to acknowledge the contribution of Mike Kelly, CASA's first executive director, who served this organization and its predecessor until December 1998. Mike's talent and dedication helped CASA become the leading organization it is today. Donna Tingley, CASA's new executive director, has already proven herself to be more than capable of building on the strong foundation Mike created. She is a welcome addition to the CASA team.

I would like to thank all board members and stakeholders for their ongoing support of alliance operations and special projects. I would also like to take this opportunity to thank my Alberta Government colleagues within the departments of Environment, Health and Wellness, and Resource Development for their support over the past year.

Ken Smith
CASA Board of Directors
December 31, 1999

Stakeholder group              Director and alternate
Agriculture                    Herman Schwenk, Alberta Federation of Rural Electrification Associations
                                Jennifer Bocock, Women of Unifarm
Alberta Environment            Doug Tupper, assistant deputy minister
                                 David Spink, director
Alberta Health and Wellness    Cecile Lord, assistant deputy minister
                                 Stephan Gabos, senior team leader
Alberta Resource Development   CASA president, Ken Smith, deputy minister
                                 John Donner, assistant deputy minister
Alternate energy                Ken Newel, Powersource Energy Systems Inc.
                                 David Baker, Phoenix Engineering Inc.
Chemical manufacturers         Wil VandenBorn, Dow Chemical Canada
                                 Ken Tsang, Dow Chemical Canada
Consumer/transportation         Rob Taylor, Alberta Motor Association
                                 Dan VanKeeken, Alberta Motor Association
Environment Canada             Jim Vollmershaussen, director general
                                 Tim Goos, regional director
Local government               Bob Hawkesworth, Alberta Urban Municipalities Association
                                 Eugene Wauters, Alberta Association of Municipal Districts and Counties
Mining                         Dermot Lane, Fording Coal Limited
                                 Ron Laing, Inland Cement
NGO health                     Jerry Hall, Alberta Lung Association
                                 Al Kennedy, Coopers Price Waterhouse
NGO pollution                  CASA vice president, Tom Marr-Laing, Pembina Institute
                                 James Tweedie, Bert Riggall Environmental Foundation
                                 Myles Kitagawa, Toxics Watch Society
NGO pollution                  Henny Pirker, South Peace Environmental Association
                                 Martha Kostuch, Prairie Acid Rain Coalition
NGO wilderness                 CASA vice president, Laura Miller, Conoco Canada Limited
                                 Gord Lambert, Suncor Energy Inc.
Oil & gas                      Gilles Courtemanche, Imperial Oil Strathcona Refinery
                                 Bill Levy, Western Division, Canadian Petroleum Products
Petroleum products             Institute
Small explorers & producers    John Squarek, Oasis Energy Inc.
                                 Mitch Shier, Ballem MacInnes
Utilities                      R.H. (Dick) Walthall, ATCO Electric
                                 Joe Kostler, ATCO Electric
CASA executive director        Donna Tingley
Thank you to past board members

CASA gratefully acknowledges the contribution of board members, indicated below, who stepped down in 1999.

Doug Baldwin, Imperial Oil Resources Limited
Jason Edworthy, Nor’wester Energy Systems Ltd.
Steve Griffiths, Imperial Oil Strathcona Refinery
Bart Guyon, Alberta Association of Municipal Districts & Counties
Trent Hardin, Toxics Watch Society
David Lewin, EPCOR
Dan Smith, Pembina Institute

Secretariat

Acting executive director: Dennis Stokes (until August 31, 1999)
Executive director: Donna Tingley (as of September 1, 1999)
Senior project manager: Christine Macken
Science advisor: Marianne English
Office manager: Bernice Lloyd
Administrative assistants: Christa Cruthers, Marilyn Parker
Graphic coordinator: Roy Swenson
Communications officer: Brad Ledig (until March 31, 1999)
Highlights in 1999

New strategic framework for CASA
(There is more information on page 7.)
The Clean Air Strategic Alliance adopted a strategic framework for action in November 1999. Under the framework, CASA will focus on four key areas:

- Pollution prevention/continuous improvement,
- Human and animal health,
- Ecological health, and
- Socio-economic integration.

New project team
(There is more information on page 10.)
CASA agreed to terms of reference for a new project team on animal health. The Animal Health Project Team's goal is to prevent short and long term adverse impacts of air contaminants on animal health.

New working group
(There is more information on page 9.)
CASA formed a new working group to develop terms of reference for a Pollution Prevention/Continuous Improvement Project Team.

Climate Change Project Team
(There is more information on page 11.)
This team initiated an innovative project in 1999 to understand the barriers that inhibit Albertans from taking actions to reduce greenhouse gas emissions.

Multi-Stakeholder Group for Particulate Matter and Ozone
(There is more information on page 12.)
This team completed its report to Alberta Environment containing advice pertaining to the development of Canada-wide standards for particulate matter and ozone.

Target Loading Subgroup
(There is more information on page 9.)
The Target Loading Subgroup under the Acidifying Emissions Management Implementation Team developed a management framework for preventing harmful effects of acid deposition in Alberta, based on the application of critical and target loads.

Alberta ROVER Project
(There is more information on page 14.)
The Alberta ROVER Project released its report and recommendations in March 1999.

Flaring project wins Alberta Emerald Award
(There is more information at www.emeraldawards.com.)
In 1999, the Alberta Emerald Foundation for Environmental Excellence awarded an Alberta Emerald Award in the not-for-profit category to CASA's Solution Gas Flaring Project Team. The award recognizes the outstanding initiative and leadership of the team in reaching consensus on a series of recommendations requiring long-term commitment to achieve the eventual elimination of routine solution gas flaring.
Activities in 1999

Strategic framework

In 1999, the Board of Directors adopted a strategic framework for action. Developed over a two-year period by the Strategic Planning Team, the framework defines the alliance's efforts on a go-forward basis and forms the foundation for evaluating new initiatives and reconciling priorities. This is a departure from CASA's former role, which largely involved public and scientific issues follow-up. The strategic framework focuses on four key areas:

1. Pollution prevention/continuous improvement

   **Issue:** Clean air is a valuable resource and should be protected.

   **Opportunity:** Continuously improve air quality by minimizing the use of polluting processes, practices, materials and products.

   **Goals:**
   - A working environment in which pollution prevention/continuous improvement is used to protect air quality.
   - Public contributes to pollution prevention by making clean air friendly choices.

   **Objectives:**
   - Identify and recommend cost-effective reduction opportunities.
   - Encourage innovative reduction opportunities in all sectors.
   - Establish system of incentives for pollution prevention/continuous improvement.

2. Human and animal health

   **Issue:** Outdoor and indoor air contaminants impact human and animal health.

   **Opportunity:** Assess the impact of air contaminants on human and animal health, manage potential health risks, and recommend actions.

   **Goal:** Prevention of adverse short and long-term effects due to indoor and outdoor contaminants.

   **Objectives:**
   - Detect human and animal health effects attributable to air contaminants.
   - Develop a management response system to manage identified risks.
   - Assess air quality guidelines and objectives to ensure human and animal health are protected.
3. Ecological health

**Issue:** Air emissions impact ecosystems health.

**Opportunity:** Increase the knowledge base, influence priorities, and recommend actions addressing acute and chronic effects of air emissions on ecosystems health in Alberta.

**Goal:** Prevention of adverse short or long term effects of air emissions on ecosystem health.

**Objectives:**
- Increase knowledge of effects posed by air emissions.
- Develop a management system to respond to identified risks.
- Assess air quality guidelines to ensure ecosystems are protected.

---

4. Socio-economic integration

**Issue:** Air quality decision-making should reflect social, economic and environmental considerations.

**Opportunity:** Integrate existing socio-economic information and continually improve the knowledge base.

**Goal:**
- Recommendations optimize social, economic and environmental benefits and minimize costs to Albertans.
- Limited resources are used effectively.
- CASA decision-making is sensitive to public opinion about air quality.

**Objectives:**
- Assess the costs and benefits of emissions, impacts and management action: use in CASA decisions.
- Identify and pursue initiatives with multiple benefits to reduce overall costs.
- Balance social, economic, and environmental considerations in decision making.
- Integrate air quality issues into planning processes (land use, transportation, community and municipal planning.)
- Develop effective public engagement program.
- Monitor public opinion on air quality issues.

---

**Strategic Planning Team**

| John Donner, Alberta Environment |
| Stephan Gabos, Alberta Health & Wellness |
| Tim Goos, Environment Canada |
| Martha Kostuch, Prairie Acid Rain Coalition |
| Gord Lambert, Suncor Energy Inc. |
| David Lewin, EPCOR |
| Cecilie Lord, Alberta Health & Wellness |
| Dennis Stokes, Alberta Environment |
| Doug Tupper, Alberta Environment |
| James Tweedie, Bert Riggall Environmental Foundation |
Pollution prevention/continuous improvement

To address the pollution prevention/continuous improvement focus area in CASA’s new strategic framework, CASA formed a Pollution Prevention/Continuous Improvement Working Group to develop terms of reference for review by the Board of Directors. The working group will follow the process established in the comprehensive air quality management system (CAMS) and will consider linkages with current alliance activities.

Pollution Prevention/Continuous Improvement Working Group

Co-chair, Gray Jones, Western Canada Wilderness Committee
Co-chair, George Murphy, Alberta Environment
Rod Frith, Environment Canada
Kim Johnson, Shell Canada Limited
Myles Kitagawa, Toxics Watch Society
Martha Kostuch, Prairie Acid Rain Coalition
Brent Lakeman, Alberta Environment
Gord Lambert, Suncor Energy Inc.
Kevin M cLeod, Alberta Health & Wellness
Henry Pirker, South Peace Environmental Association
James Tweedie, Bert Riggall Environmental Foundation

Sulphur dioxide management - target loading

The Target Loading Subgroup completed its work in 1999 to develop a management framework for preventing harmful effects of acid deposition in Alberta. The framework, which was accepted by the board, puts Alberta in the enviable position of having a management plan in place prior to experiencing any acid deposition effects in the province. Alberta Environment has accepted the management plan for immediate implementation.

The framework for management of acid deposition in Alberta is based on the application of critical and target loads. The primary application is in the management of acidifying emissions and acid deposition on a long-term, regional basis. They may also be used as a guide in the review of the proposed construction of a facility that will emit acidifying substances.

Copies of the Final Report of the Target Loading Subgroup on Critical Target Loading in Alberta are available from CASA.

Target Loading Subgroup

Chair, Ken Foster, Alberta Environment
Secretary, Karen M cDonald, Environment Canada
Dave Ballagh, Saskatchewan Environment and Resource Management
Kim Eastlick, Alberta Energy and Utilities Board
Martha Kostuch, Prairie Acid Rain Coalition
Les Johnston, EPCOR
David M cCoy, Husky Oil
Ron Pauls, Syncrude Canada Limited
Animal health

In 1999, CASA agreed to terms of reference for an Animal Health Project Team. The goal of the project team is to prevent short and long term adverse impacts of air contaminants on animal health.

The team held a workshop to understand the relationship between animal health and air contaminants. The objective of the workshop was to review current studies and research and to identify data and information gaps. Proceedings from the workshop are available at www.casahome.org.

The Animal Health Project Team's objectives are to:

- Identify key concerns regarding the effects of air emissions on animal health.
- Investigate animal health impacts attributable to air contaminants.
- Develop a management response system to manage identified risks.
- Assess air quality guidelines and objectives and make recommendations to ensure animal health is protected.
- Document and summarize scientific and local/traditional knowledge regarding the effects of air emission on animal health.
- Identify research gaps and make recommendations to fill the gaps.
- Communicate with stakeholders.

### Animal Health Project Team

Co-chair, Dennis Kohlman, Petro-Canada Resources
Co-chair, Martha Kostuch, Prairie Acid Rain Coalition
Cecil Anderson, Pembina Agriculture Protection Association
Paul Belanger, Green Foundation
Bill Bocock, Rose Ridge Citizens
Jenny Bocock, Women of UniFarm
Ralph Christian, Alberta Agriculture, Food and Rural Development
Robert Coppock, Alberta Research Council
Judy Huntley, Bert Riggall Environmental Foundation
Dwight Jenkinson, Mobil Oil Canada
Kim Johnson, Shell Canada Limited
Ila Johnston, Parkland Airshed Management Zone
Wayne Johnston, Farmer
Gray Jones, Western Canada Wilderness Committee (corresponding)
Joe Kendall, Alberta Agriculture, Food and Rural Development
Rob Kennedy, Alberta Energy and Utilities Board (observer)
Colleen MacDougall, Alberta Veterinary Association (observer)
Kevin McLeod, Alberta Health & Wellness
Bob Patrick, National Farmers Union
Henry Pirker, South Peace Environmental Association
David Pryce, Canadian Association of Petroleum Producers
Mike Sawyer, Citizens Oil and Gas Council (corresponding)
Harvey Scott, Friends of the Athabasca
Chris Severson-Baker, Pembina Institute
John Squarek, Oasis Energy Inc.
Dennis Stokes, Alberta Environment
Cliff Whitelock, Pembina Agriculture Protection Association
The Climate Change Project Team initiated an innovative pilot project in 1999 to understand the barriers that inhibit Albertans from taking actions to reduce greenhouse gas emissions as well as to stimulate behavioural change that will result in reduced greenhouse gas emissions. Phase one of the project consisted of an assessment of the knowledge of ordinary Albertans of climate change, their perception of the importance of climate change, their awareness of actions available to reduce greenhouse gas emissions and their personal barriers to reducing greenhouse gas emissions. Later stages of the project, which will start in 2000, will involve design of an outreach project based on the information from the public survey, delivery of the project on a pilot basis, evaluation, and redesign of the program.

The team is pursuing a wide range of climate change actions as well. Early in the year, the team focused on “early actions” in several key areas, particularly opportunity areas identified December 15, 1998 at the Workshop on Demand Management and Conservation in Alberta’s Electricity Industry. The team began identifying and considering medium and longer term opportunities in the fall, while still pursuing key short term actions. In June 1999, the team provided a proposal on their potential role in relation to Climate Change Central.
Particulate matter and ozone

The Multi-Stakeholder Group for Particulate Matter and Ozone completed its report to Alberta Environment in November 1999. Formed in 1998, through CASA, this group's purpose was to advise Alberta Environment on the development of Canada-wide standards for particulate matter and ozone and the development of Alberta ambient air quality guidelines for the two substances. The multi-stakeholder group tried to reach consensus throughout its discussions and did reach consensus on the recommendations and on some details related to the level, form and timing of the standards.

Alberta Environment is expected to request CASA to apply CAMS to develop an implementation plan for the Canada-wide standards on particulates and ozone, starting in 2000.

This group's report is available on the CASA website at www.casahome.org.

Multi-Stakeholder Group for Particulate Matter and Ozone

Chair, George Murphy, Alberta Environment
Dana Atwell, Shell Canada Limited
Alan Brownlee, City of Edmonton
Jim Dixon, NOVA Chemicals Limited
Wes Dohlum, Inland Cement Limited
Long Fu, Alberta Environment
Geoff Granville, Shell Canada Limited
Brian Hudson, Alberta Resource Development
Kerra Hunt, Alberta Environment
Myles Kitagawa, Toxics Watch Society
Martha Kostuch, Prairie Acid Rain Coalition
Ingrid Liepa, TransAlta Utilities Corporation
Alex Mackenzie, Alberta Health & Wellness
Sheldon Roth, Alberta Lung Association
Neil Shelly, Alberta Forest Products Association
Kent Steuhmer, Inland Cement Limited
James Tweedie, Bert Riggall Environmental Foundation
Srikanth Venugopal, TransCanada Transmission
Data issues workshop planning

In June 1999, the board approved the Strategic Planning Team's recommendation to have the Secretariat lead the organization of a workshop to address data/information issues. The Data Issues Workshop Organizing Committee and the Secretariat worked to plan the workshop. The workshop was held March 13 and 14, 2000.

The workshop objectives were to:

- Clarify key information needs.
- Confirm existing information/data sets and existing mechanisms for sharing data.
- Identify and prioritize information gaps and data needs.
- Identify issues surrounding access to, and intelligent use of, existing data.
- Identify issues surrounding the linking/integration of data sets and the actions needed to link/integrate data sets.
- Develop, and prioritize if possible, recommendations on: actions to fill data gaps, actions to improve access to and use of data, and improved integration of data sets.

Data Issues Workshop Organizing Committee

- Dana Atwell, Shell Canada Limited
- Judy Huntley, Bert Riggall Environmental Foundation
- Markus Kellerhals, Environment Canada
- Myles Kitagawa, Toxics Watch Society
- Joe Kostler, ATCO Electric
- Alexander MacKenzie, Alberta Health & Wellness
- Dave Slubik, Alberta Environment
- James Tweedie, Bert Riggall Environmental Foundation
- Darcy Walberg, Agrium Inc.
- Kevin Warren, Amarok Consulting, Parkland Airshed Management Zone
- Gary Webster, Canadian Association of Petroleum Producers
Projects update

Vehicle Emissions Implementation
Design Team

This team continued to pilot, monitor, and evaluate the implementation of the following initiatives:

- Vehicle Scrappage Pilot Project
- Anti-tampering measures for fuelled and alternatively fuelled vehicles
- SMOG FREE
- Remote sensing
- Gathering data on vehicle systems tampering
- Auto$mart
- FleetSmart
- Data requirements

In 1999, the team completed its report on the results of the ROVER Remote Sensing Project and presented it to board and is available on the CASA website, www.casahome.org.

Vehicle Emissions Implementation Design Team

| Co-chair, M ahmuda A li, Alberta Infrastructure |
| Co-chair, A lan Brownlee, City of Edmonton |
| Co-chair, C indy Chiasson, Environmental Law Centre |
| Co-chair, K athryn Maier, Sustainable Alberta |
| L arry Begoray, A lberta Environment |
| G erry Ertel, Shell Canada Products Limited |
| R oberta Franchuk, Environmental Resource Centre |
| R od Frith, Environment Canada |
| J erry Hall, A lberta L ung A ssociation |
| C ollin Heath, A lberta Trucking Association |
| L awrence Schmidt, A lberta Infrastructure |
| M yles K itagawa, Toxics Watch Society |
| B rent Lakeman, A lberta Environment |
| J aison Polityo, A lberta Infrastructure |
| D ave Reynolds, City of Calgary (corresponding) |
| L awrence Schmidt, A lberta Infrastructure |
| A ndre Schutta, ATCO Gas (corresponding) |
| H erman Schwenk, A lberta Federation of Rural Electrification Associations |
| L idia Stefaniw, A lberta Health & Wellness |
| J ack Thompson, Calgary Motor Dealers' Association |
| J ames Tweedie, Bert Riggall Environmental Foundation (corresponding) |
| D an VanK eeke, A lberta M otor Association |
Ambient air quality monitoring -
Operations Steering Committee

An Operations Steering Committee for the Alberta Ambient Air Quality Monitoring System was established in May 1998 to provide overall direction, track progress and make budgetary decisions regarding the implementation of the provincial monitoring network. In 1999, a new continuous air quality monitoring station was established by Alberta Environment (AENV) in Red Deer and is operated in co-operation with the City of Red Deer.

In 1999, the Alberta Ambient Air Data Management System, also known as the CASA data warehouse, was expanded to contain continuous (hourly) air quality data from 25 stations operated by AENV, the Wood Buffalo Environmental Association, the West Central Airshed Society, Strathcona Industrial Association and Environment Canada. The data warehouse can be found at www.casadata.org.

Human Health Project Team

In 1999, the board accepted an implementation plan for the framework of a human health monitoring system developed by the Human Health Project Team and approved in 1998. The proposed framework will:

1. Provide better linkages between air quality data and human health outcomes.
2. Provide a framework for carrying out more detailed exposure and health effects monitoring.
3. Contribute to long term trends analysis of both air pollution and population health status.
4. Increase our understanding of the complex relationship between ambient air quality and human health outcomes.

Human Health Project Team

Chair, Alex MacKenzie, Alberta Health & Wellness
Tim Gondek, Suncor Energy Inc.
Geoff Granville, Shell Canada Limited
Jerry Hall, Alberta Lung Association
Lloyd Harman, Alberta Forest Products Association
Les Johnston, EPCOR
Don Macdonald, Alberta Resource Development
Chris Severson-Baker, Pembina Institute
Dennis Stokes, Alberta Environment
Kent Stuehmer, Inland Cement Limited
Rudy Zimmer, David Thompson Health Authority

Operations Steering Committee

Chair, Bob Stone, Alberta Environment
Dave Fox, Environment Canada
Greg Gaberts, West Central Airshed Society
Joe Kostler, ATCO Electric
Alex MacKenzie, Alberta Health & Wellness
Bob Myrick, Alberta Environment
Eric Peake, West Central Airshed Society
Bob Scotten, Wood Buffalo Environmental Association
Dan Smith, Pembina Institute
Andy Teal, Imperial Oil Resources
Kevin Warren, A marok Consulting, Parkland Airshed Management Zone
This year was important and challenging in the history of the Parkland Airshed Management Zone (PAMZ). Several association goals were achieved and significant progress was made on others.

Early in the year, the zone’s stakeholders ratified the design of the PAMZ Zonal Air Quality Monitoring (AQM) Program, the culmination of two years of work by the association’s Technical Working Group. In March, a program manager was hired and shortly thereafter application was made to Alberta Environment, on behalf of twenty-one member companies’ facilities, to collapse their existing Compliance Ambient AQM Programs. Collapsing these programs will allow the companies to channel funds and some required resources towards the PAMZ Zonal Program.

A significant milestone was achieved December 1, 1999, with the start-up of the passive monitoring component of the PAMZ Zonal AQM Program. Triplicate NO, O3, and SO2 samplers have been deployed at 28 locations distributed throughout the zone. The program’s continuous monitoring component is scheduled to commence operations early in the second quarter of 2000.

Terms of reference for the Human Health Committee were developed, finalized and ratified in 1999 and the group began development of a forum for public consultation to insure its planned activities will address the health-related air quality issues of the zone’s residents. The Issues Response Group finalized the guidelines for the use of the Zonal AQM Program’s portable monitoring station.

Membership drives aimed both at municipalities and industries operating within the zone were very successful. The number of companies participating in PAMZ was tripled to 46. Six additional municipal governments have also recognized the impact of businesses and residents on the airshed and have joined PAMZ.

Numerous well-received presentations about the association have been given to companies, community organizations, schools, and the public. The communications committee continues to work on strategies and programs focused on strengthening the association’s foundation by broadening its membership base and communicating openly information about the association.
West Central Airshed Society

The West Central Airshed Society moves into the 21st century with solid air quality and bio-monitoring programs tailored to meet the needs of its members in the “Community Approach to Air Quality Management.” By adhering to the program design, following the initial five-year business plan and continually evaluating and adapting change to its program, the society has achieved its goal of a full complement of five air quality monitoring stations and five agricultural bio-monitoring sites.

From the four years (1994 to 1999) of publicly available continuous air quality monitoring data, the society has gained an understanding of regional air quality in the West Central Airshed Zone. Pollutant concentrations are generally low, much lower than found in Alberta's major cities or in the more industrialized areas of the province. Although atmospheric concentrations of sulphur dioxide are well below Alberta environment guidelines, mild systems of injury were found on Saskatoon foliage and are being evaluated. To date, there is no evidence of productivity loss in the saskatoons or alfalfa test plots.

Wood Buffalo Environmental Association

The Wood Buffalo Environmental Association (WBEA) focused on developing stakeholder relationships and open communication in the community in 1999. Two new members joined the association, bringing the total membership to seventeen. Since 1997, the association membership has doubled. New members continue to add depth to the association by sharing information, discussing issues and participating in the operation of the association’s programs.

The WBEA continues to develop its communications program. This year, the association participated in trade shows; community, industry and government presentations; erected a billboard; improved its website to allow live data access; produced a new brochure; and started production of a video.

Extensive work was done on upgrading the ambient air-monitoring network. Several new analyzers and an extensive parts inventory were added. The Terrestrial Environmental Effects Monitoring program completed studies on vegetation, soil acidification and trace metals in traditional food sources. A working group on ozone modeling undertook a re-evaluation of ozone modeling in the region. A data review was commissioned in 1999 producing a report on air quality in the oil sands region with comparisons to other communities and government standards.
**Support for CASA**

CAS A has tried to put an actual dollar figure on the support and assistance provided by participating organizations.

These figures were compiled by examining time and travel costs, as well as cash and inkind contributions to alliance projects and the three airshed zones. They almost certainly under-record and under-estimate the actual value of stakeholder contributions, but are offered in the spirit of acknowledging and formally recognizing participant involvement.

**Total contributions to the alliance including cash and inkind:**

### Alliance projects

- **Government:** $262,125
- **Industry:** $221,300
- **NGOs*:** $174,925

### Airshed zones

- **Government:** $67,700
- **NGOs*:** $108,450
- **Industry:** $2,972,450

**Total contributions:**

- **Inkind:** $531,950
- **Cash:** $126,400
- **Combined:** $658,350

**Total contributions:**

- **Inkind:** $291,275
- **Cash:** $2,857,325
- **Combined:** $3,148,600

These figures includes all three airshed zones managed by:

- Parkland Airshed Management Zone Association
- West Central Airshed Society
- Wood Buffalo Environmental Association
Auditors' report

To the Members of
The Clean Air Strategic Alliance Association

We have audited the balance sheet of the Clean Air Strategic Alliance Association as at December 31, 1999 and the statements of revenue, expenditures and surplus and cash flow for the year then ended. These financial statements are the responsibility of the Association’s management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Association as at December 31, 1999 and the results of its operations and cash flow for the year then ended in accordance with generally accepted accounting principles.

Chartered Accountants

February 4, 2000
## Balance Sheet

**December 31, 1999**

### Assets

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CURRENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$208,268</td>
<td>$141,925</td>
</tr>
<tr>
<td>Treasury Bills</td>
<td>1,039,004</td>
<td>500,163</td>
</tr>
<tr>
<td>Accrued interest</td>
<td>15,106</td>
<td>2,813</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>7,004</td>
<td>58,041</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>2,354</td>
<td>7,359</td>
</tr>
<tr>
<td></td>
<td><strong>1,271,736</strong></td>
<td><strong>710,301</strong></td>
</tr>
<tr>
<td><strong>CAPITAL ASSETS (Note 3)</strong></td>
<td>18,193</td>
<td>6,547</td>
</tr>
<tr>
<td></td>
<td><strong>$1,289,929</strong></td>
<td><strong>$716,848</strong></td>
</tr>
</tbody>
</table>

### Liabilities

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CURRENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$38,921</td>
<td>$75,058</td>
</tr>
<tr>
<td>Deferred grant revenue (Note 4)</td>
<td>554,732</td>
<td>353,476</td>
</tr>
<tr>
<td>Deferred external project revenue (Note 5)</td>
<td>530,762</td>
<td>157,578</td>
</tr>
<tr>
<td></td>
<td><strong>1,124,415</strong></td>
<td><strong>586,112</strong></td>
</tr>
<tr>
<td><strong>SURPLUS</strong></td>
<td>165,514</td>
<td>130,736</td>
</tr>
<tr>
<td></td>
<td><strong>$1,289,929</strong></td>
<td><strong>$716,848</strong></td>
</tr>
</tbody>
</table>

**APPROVED BY THE BOARD**

*Signature:*

**Director**

*Signature:*

**Director**

*Signature:*
Statement of revenue, expenditures and surplus

Year ended December 31, 1999

<table>
<thead>
<tr>
<th>Revenue</th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants (Note 4)</td>
<td>$508,744</td>
<td>$580,079</td>
</tr>
<tr>
<td>External projects (Note 5)</td>
<td>144,701</td>
<td>162,535</td>
</tr>
<tr>
<td>Interest</td>
<td>34,778</td>
<td>26,038</td>
</tr>
<tr>
<td></td>
<td><strong>688,223</strong></td>
<td><strong>768,652</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditures</th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects</td>
<td>207,369</td>
<td>209,454</td>
</tr>
<tr>
<td>Communications</td>
<td>109,093</td>
<td>143,324</td>
</tr>
<tr>
<td>External projects</td>
<td>141,395</td>
<td>144,266</td>
</tr>
<tr>
<td>Board support</td>
<td>72,790</td>
<td>128,143</td>
</tr>
<tr>
<td>General and administration</td>
<td>96,691</td>
<td>78,274</td>
</tr>
<tr>
<td>Non-government organizations</td>
<td>14,628</td>
<td>24,786</td>
</tr>
<tr>
<td>Statement of concern and other</td>
<td>9,864</td>
<td>14,367</td>
</tr>
<tr>
<td></td>
<td><strong>651,830</strong></td>
<td><strong>742,614</strong></td>
</tr>
</tbody>
</table>

**EXCESS OF REVENUE OVER EXPENDITURES BEFORE THE UNDERNOTED**

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOSS ON SALE OF CAPITAL ASSETS</td>
<td>(1,615)</td>
<td>–</td>
</tr>
<tr>
<td><strong>EXCESS OF REVENUE OVER EXPENDITURES</strong></td>
<td>34,778</td>
<td>26,038</td>
</tr>
<tr>
<td><strong>SURPLUS, BEGINNING OF YEAR</strong></td>
<td>130,736</td>
<td>104,698</td>
</tr>
<tr>
<td><strong>SURPLUS, END OF YEAR</strong></td>
<td><strong>$165,514</strong></td>
<td><strong>$130,736</strong></td>
</tr>
</tbody>
</table>
Statement of cash flow
Year ended December 31, 1999

NET INFLOW (OUTFLOW) OF CASH RELATED TO THE FOLLOWING ACTIVITIES

<table>
<thead>
<tr>
<th>Operating Activities</th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excess of revenues over expenditures</td>
<td>$34,778</td>
<td>$26,038</td>
</tr>
<tr>
<td>Add items not requiring an outlay of cash</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>7,797</td>
<td>2,809</td>
</tr>
<tr>
<td>Loss on sale of capital assets</td>
<td>1,615</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td><strong>44,190</strong></td>
<td><strong>28,847</strong></td>
</tr>
<tr>
<td>Increase in accrued interest</td>
<td>( 12,293 )</td>
<td>( 1,686 )</td>
</tr>
<tr>
<td>Decrease (increase) in accounts receivable</td>
<td>51,037</td>
<td>( 28,497 )</td>
</tr>
<tr>
<td>(Decrease) increase in prepaid expenses</td>
<td>5,005</td>
<td>( 5,069 )</td>
</tr>
<tr>
<td>(Decrease) increase in accounts payable</td>
<td>( 36,137 )</td>
<td>23,521</td>
</tr>
<tr>
<td>Increase in deferred grant revenue</td>
<td>201,256</td>
<td>70,921</td>
</tr>
<tr>
<td>Increase (decrease) in deferred external project revenue</td>
<td><strong>373,184</strong></td>
<td>( 60,669 )</td>
</tr>
<tr>
<td></td>
<td><strong>626,242</strong></td>
<td><strong>27,368</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investing Activities</th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase of capital assets</td>
<td>( 23,904 )</td>
<td>—</td>
</tr>
<tr>
<td>Proceed on sale of capital assets</td>
<td>2,846</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>( 21,058 )</td>
<td>—</td>
</tr>
<tr>
<td>INCREASE IN CASH AND SHORT-TERM INVESTMENTS</td>
<td><strong>605,184</strong></td>
<td>27,368</td>
</tr>
<tr>
<td>CASH AND SHORT-TERM INVESTMENTS, BEGINNING OF YEAR</td>
<td><strong>624,088</strong></td>
<td><strong>614,720</strong></td>
</tr>
<tr>
<td>CASH AND SHORT-TERM INVESTMENTS, END OF YEAR</td>
<td>$1,247,272</td>
<td>$642,088</td>
</tr>
<tr>
<td>REPRESENTED BY:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$208,268</td>
<td>$141,925</td>
</tr>
<tr>
<td>Treasury Bills</td>
<td>1,039,004</td>
<td>500,163</td>
</tr>
<tr>
<td></td>
<td><strong>$1,247,272</strong></td>
<td><strong>$642,088</strong></td>
</tr>
</tbody>
</table>
Notes to the financial statements

Year ended December 31,

1. DESCRIPTION OF OPERATIONS

The Clean Air Strategic Alliance Association is a non-profit organization incorporated March 14, 1994 under the Societies Act of Alberta. The Association is comprised of members from three distinct stakeholder categories: industry, government and non-government organizations. The Association has been given shared responsibility by its members for strategic air quality planning, organizing and coordination of resources, and evaluation of results in Alberta. In support of these objectives, the Association receives cash funding from the Province of Alberta as well as cash and in-kind support from other members.

2. ACCOUNTING POLICIES

These financial statements have been prepared using the restricted funds method of accounting in accordance with generally accepted accounting principles and include the following significant accounting policies:

Revenue recognition

Grant monies received are recognized as revenue for accounting purposes when the Association has satisfied the terms of the grant agreements. Funding received in advance is carried as deferred grant revenue.

External project monies received are recognized as revenue for accounting purposes when the Association has satisfied the terms of the projects. Funding received in advance is carried as deferred external project revenue.

The surplus, which represents an accumulation of interest earned, is unrestricted.

Capital assets

Capital assets are recorded at cost. Depreciation, which is based on the cost less the residual value over the useful life of the asset, is computed using the declining-balance method at the rates disclosed in Note 3.

Non-monetary support

Association members contribute non-monetary support including staff resources, meeting space and publication support. The value of this non-monetary support is not reflected in these financial statements.
3. CAPITAL ASSETS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation Rates</td>
<td>Cost</td>
<td>Accumulated Depreciation</td>
</tr>
<tr>
<td>Computer equipment 30%</td>
<td>$26,825</td>
<td>$9,353</td>
</tr>
<tr>
<td>Furniture and equipment 30%</td>
<td>$3,932</td>
<td>$3,211</td>
</tr>
<tr>
<td></td>
<td>$30,757</td>
<td>$12,564</td>
</tr>
</tbody>
</table>

4. DEFERRED GRANT REVENUE

Deferred grant revenue is comprised of the grant monies received which have not yet been expended for the purposes specified in the grant agreements.

Deferred Grant Revenue | 1999 | 1998 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred grant revenue, beginning of year</td>
<td>$353,476</td>
<td>$282,555</td>
</tr>
<tr>
<td>Grant monies received</td>
<td>$710,000</td>
<td>$651,000</td>
</tr>
<tr>
<td>Revenue recorded based on allowable expenditures</td>
<td>$(508,744)</td>
<td>$(580,079)</td>
</tr>
<tr>
<td>Deferred grant revenue, end of year</td>
<td>$554,732</td>
<td>$353,476</td>
</tr>
</tbody>
</table>
5. **DEFERRED EXTERNAL PROJECT REVENUE**

Deferred external project revenue is comprised of monies received for specific external projects which have not been expended for the purposes specified in the mandates of the projects.

<table>
<thead>
<tr>
<th>Deferred External Project Revenue</th>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred external project revenue, beginning of year</td>
<td>$157,578</td>
<td>$218,247</td>
</tr>
<tr>
<td>Grant monies received</td>
<td>$517,885</td>
<td>$101,866</td>
</tr>
<tr>
<td>Revenue recorded based on allowable expenditures</td>
<td>$(144,701)</td>
<td>$(162,535)</td>
</tr>
<tr>
<td>Deferred external project revenue, end of year</td>
<td>$530,762</td>
<td>$157,578</td>
</tr>
</tbody>
</table>

Included in the above are financial contributions in the amount of $324,325 (1998 - Nil) received by the Association to be held to provide funding for the National Climate Change Process.

<table>
<thead>
<tr>
<th>1999</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial contributions received</td>
<td>$364,325</td>
</tr>
<tr>
<td>Expenditures on behalf of National Climate Change Process</td>
<td>$(40,000)</td>
</tr>
<tr>
<td>Balance, National Climate Change Process</td>
<td>$324,325</td>
</tr>
</tbody>
</table>

6. **NON-MONETARY SUPPORT**

During the year, the Association received non-monetary support in the form of office space valued at $25,900 (1998 - $25,900) from the Province of Alberta - Environmental Protection. This amount has not been reflected in these financial statements.

7. **UNCERTAINTY DUE TO THE YEAR 2000 ISSUE**

The Year 2000 Issue arises because many computerized systems use two digits rather than four to identify a year. Date-sensitive systems may recognize the year 2000 as 1900 or some other date, resulting in errors when information using year 2000 dates is processed. In addition, similar problems may arise in some systems that use certain dates in 1999 to represent something other than a date. Although the change in date has occurred, it is not possible to conclude that all aspects of the Year 2000 Issue that may affect the entity, including those related to customers, suppliers, or other third parties, have been fully resolved.
Vision
The air will be odourless, tasteless, look clear and have no measurable short- or long-term adverse effects on people, animals or the environment.

Mission statement
The Clean Air Strategic Alliance is a stakeholder partnership that has been given shared responsibility by its members, including the Government of Alberta, for strategic planning, organizing and coordinating resources, and evaluation of air quality in Alberta through a collaborative process.

Clean Air Strategic Alliance
9th Floor, Sterling Place
9940-106 Street
Edmonton, Alberta
Canada T5K 2N2
Tel: 780-427-9793
Fax: 780-422-3127
Email: casa@casahome.org
Website: www.casahome.org