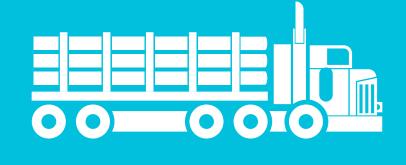


2024 ANNUAL REPORT



















#### **CLEAN AIR STRATEGIC ALLIANCE**

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# Chemical Formulas and Names

NO	Nitrogen	Oxides

PM<sub>2.5</sub> Fine Particulate Matter

O<sub>3</sub> Ozone

NO<sub>2</sub> Nitrogen DioxideSO<sub>2</sub> Sulphur Dioxide

H₂S Hydrogen Sulfide

TRS Total Reduced Sulphur

VOCs Volatile Organic Compounds

#### Clean Air Strategic Alliance Acronyms

AAC Alberta Airsheds Council

EPA Environment and Protected Areas
AQMS Air Quality Management System
CASA Clean Air Strategic Alliance

GoA Government of Alberta

ROVER III Roadside Optical Vehicle Emissions Reporter III

# About the Clean Air Strategic Alliance



The Clean Air Strategic Alliance (CASA) is a partnership composed of representatives selected by industry, government, non-government stakeholders, First Nations, and Métis communities. All members have an interest in air quality. We participate in strategic air quality planning for Alberta by pinpointing key air quality management issues and offering widely supported, evidence-based recommendations, information, and tools. Our approach considers environmental and economic impacts. CASA's commitment to using a consensus decision-making process to achieve consensus whenever possible has created a unique and trusted forum for air issue discussions and resolutions. We recognize the value in striving for consensus, even if it isn't always reached.

Environment and Protected Areas provides core funding to CASA through a grant. Audited financial statements for fiscal year 2024 are available on the CASA <u>website</u>.

#### 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 brings together a diverse group of representatives from First Nations, government, industry, Métis, non-government organizations, interested and affected stakeholders, and subject-matter experts, that are well-positioned to assess and provide strategies to improve air quality for Albertans, using a collaborative consensus process.

#### **Operating Principles**

CASA's operating principles guide how the board, staff, and participants conduct the organization's business, including administration, projects, programs, and all related activities of the Alliance.

**COLLABORATION:** We believe in the power of working together.

**INTEGRITY:** We behave ethically and are open, honest, and fair.

INDEPENDENT AND INFLUENTIAL ADVISORY BODY: We serve as an independent and influential advisory body that empowers organizations to make informed decisions.

TRANSPARENCY: We are committed to open and honest communication at all levels, both within our organization, with our members, Indigenous communities and Peoples, stakeholders, and interested parties.

**FAIRNESS:** We believe in treating every individual with equity and respect, regardless of their background, beliefs, or abilities.

**INNOVATION:** We believe in fostering a culture of continuous improvement and creativity.

**TIMELINESS:** We prioritize and coordinate our efforts to enable effective and efficient responses to air quality management issues.

**INTEGRATION:** We are dedicated to upholding the highest standards of integrated air-quality management. Our values are rooted in our commitment to

- a. environmental protection to prevent short- and long-term adverse health effects,
- b. economic performance and efficiency, and
- c. continuous improvement and pollution prevention.



## **Executive Summary**

This annual report summarizes the activities of the Clean Air Strategic Alliance (CASA) in 2024. Current members and alumni gathered to celebrate our 30th anniversary at a recognition event in April. The executive committee shared stories of the good work of CASA and the value of the relationships and the work over the past three decades.

CASA advanced work on several air quality management priorities. The organization's Operational Plan, Multi-year Communications Strategy, and <u>Strategic Plan</u> for 2024-2027 were updated with new work that examined how CASA can report on its performance and success. Project teams, working groups, committees, and the board continued using virtual tools to support remote and hybrid meetings, events, and other types of engagement with its members and partners.

The Roadside Optical Vehicle Emissions Reporter (ROVER) III Project Team completed its work in 2024. A report with recommendations was approved by the board in the fall and is scheduled for public release in 2025. A consultant report on the data collection and analysis, which formed the basis of the team's recommendations, is available on the <u>project webpage</u>.

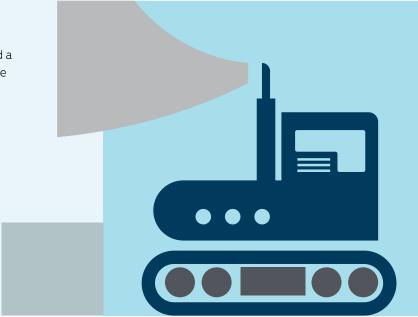
An outcome of the ROVER III project was launching a new working group at the December 2024 meeting to develop terms of reference for a project to improve understanding of the reliability of vehicle emissions controls and the magnitude of vehicle emission control tampering in Alberta.

Work toward developing a best practices guide for dust management in Alberta continued. The project team issued a request for bids to retain a consultant to conduct a literature review to inform this work and calls for funding to support the project. CASA participated in the AWMA Conference and Exhibition (AWMA) in June 2024. Several sessions about CASA's projects were presented, including a panel discussion with experts, and staff and board members hosted an exhibition booth throughout the event.

The board launched a Performance Reporting Committee to explore ways CASA could track, measure, and report on its performance in several areas. The committee guided the process to host a workshop in spring 2025.

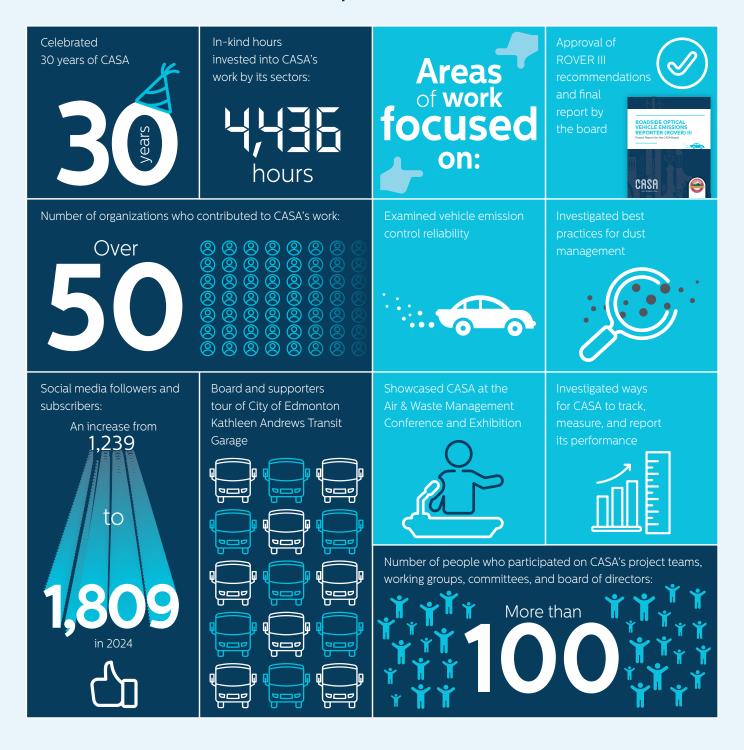
The organization relies on the contributions of its members to succeed. In 2024, over 50 organizations volunteered 4,436 hours to our board of directors and project teams.

CASA continues to operate within its approved budget and audited financial statements are available on the website. Staff and board members remain active in their outreach within Alberta and elsewhere, and share information about CASA, its projects, and the consensus-based process. For more information on CASA and its publications and activities, please visit our website.





## At a Glance/Snapshot of 2024





## Executive Director's Message

The year 2024 marked a significant milestone for CASA; our 30th anniversary since inception in 1994. CASA commemorated the occasion by hosting a field tour of the Kathleen Andrews Transit Garage followed by an evening of festivities in spring 2024. I was pleased the event was well-attended in-person and provided an opportunity for members, partners, guests, and past directors to share updates, resources, and connect personally. This milestone is a testament to the continued dedication from our members and partners over the years as we work collaboratively to contribute to air quality management priorities in Alberta.

I was especially pleased that a new strategic plan was approved to help guide our work for 2024 – 2027. It builds on CASA's unique membership, experience, expertise, and successes to keep our focus on continued strategic development and implementation of effective and efficient air quality management; fostering a mutually beneficial, collaborative approach to support strategic air quality management; and building capacity for the collaborative approach to managing air quality in Alberta.

The wildfires of 2023 and their impacts on air quality remained top-of-mind as 2024 was another active year. Our members were engaged by several experts throughout the year on this issue. This sparked valuable discussions among members on how CASA could support ongoing efforts through potential project ideas and information sharing.

Project work continued in other important areas of air quality management this year. Following several years of grueling delays, it was rewarding to see the ROVER III Project Team's final deliverables approved by the board. I look forward to the public release of these materials in 2025, and spreading the word about the team's findings among our network and to Albertans. The Best Practices Guide for Dust Management in Alberta Project Team continued work to secure additional funds and retain a consultant to support their tasks. Lastly, a Performance Reporting Committee was launched in fall 2024 to investigate ways CASA could measure and report on its performance and successes following the approval of our new strategic plan.

A highlight of 2024 was CASA's participation in the AWMA Conference and Exhibition in Calgary. This forum allowed us to share knowledge and expertise about our work and participate in networking opportunities with environmental professionals from



around the world. CASA presented on its ROVER III and Impact of Reduced Transportation on Air Quality in Alberta Associated with COVID-19 projects. I had the pleasure of chairing a panel of experienced CASA board members to discuss the insights and accomplishments of using consensus-based multi-stakeholder collaborative decision making for air policy development. Staff and board members took turns hosting an information booth at the exhibition. The event was well-attended and provided opportunities to raise our profile and generate awareness about our work to improve air quality management.

One of the most rewarding aspects of being executive director is sharing CASA's experiences and activities with others. In 2024, I had the privilege of participating and speaking (remotely and in person) at more than 14 events and having numerous conversations with external stakeholders and individuals from across Alberta and other provinces promoting CASA's value and work

Air quality management will continue to be a critical issue for Alberta, and CASA is well-positioned to play a key role in addressing it. I extend my sincere thanks to everyone who contributes to CASA's success: our board, project team members, volunteers, staff, and supporters. Your commitment and efforts are the foundation of our work, and we could not achieve our goals without you.





## Our Staff

as of December 31, 2024

Executive Director

Andre Asselin

Senior Advisor

Anuja Hoddinott

Senior Project Manager

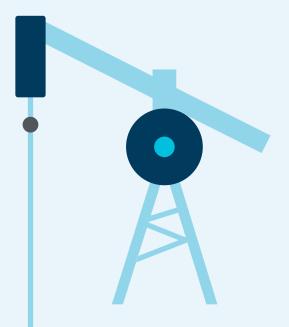
Katie Duffett

Project Manager

Alec Carrigy

Accountant
Sunny Yeung

CASA would like to acknowledge the contributions of Project Manager Mariem Oloroso who left the organization in 2024.





### **Board of Directors**

The following individuals served as members of CASA's Board of Directors as of December 31, 2024. CASA is very grateful for the ongoing commitment and support of these individuals and the organizations they represent.

#### Industry

SECTOR	DIRECTOR	ALTERNATE
Petroleum Products	Rob Hoffman	
Mining	Naomi Tercier	Brent Korobanik
Oil and Gas – Large Producers	Don McCrimmon	
Forestry	Dan Moore	Tom Tarpey
Alternate Energy	David Lawlor	Mark McGillivray
Chemical Manufacturers	Shane Lamden	Kai Horsfield
Agriculture	Melody Garner-Skiba	
Utilities	Jim Hackett (Vice President)	

#### Non-Government Organization (NGO)

SECTOR	DIRECTOR	ALTERNATE
NGO Health	Leigh Allard (Vice Presid	ent)
NGO Rural	Ann Baran	Randy Angle
NGO Industrial	Ruth Yanor	
NGO Urban	David Spink	
Consumer Transportation	Vacant	

#### Government

SECTOR	DIRECTOR	ALTERNATE
Federal Government		Martin Van Olst
Provincial Government – Environment	Patrick McDonald	Rob Hamaliuk
Local Government – Rural	Amber Link	
Local Government – Urban	Vacant	

GROUP	DIRECTOR	ALTERNATE
Samson Cree Nation	Holly Johnson-Rattlesnake	
Métis Settlements	Vacant	

CASA thanks the following directors and alternates, who stepped down in 2024, for their contributions:

Sherri Wilson (President)	Alison Miller	Jim Hackett	Rob Beleutz
Government,	Industry, Petroleum	Industry, Utilities	Industry, Mining
Provincial Government -	Products	Ahmed Idriss	<b>Humphrey Banack</b>
Environment		Industry, Utilities	Industry, Agriculture



# Project Teams and Working Groups

#### **ROVER III Project Team**

The ROVER III project was started in 2018 with the goal of measuring emissions from the in-use on-road transportation sector in Alberta, particularly diesel-fuelled trucks, to help inform management actions and next steps for transportation emissions management. The project used remote sensing technology to test emissions from vehicles, and while the focus was on heavy-duty diesel vehicles, data was also collected on light-duty vehicles. There were study sites in Edmonton, Calgary, Fort McMurray, Grande Prairie, Red Deer, and at select vehicle inspection stations throughout the province. The emissions of focus included nitrogen oxides, volatile organic compounds, carbon monoxide, carbon dioxide, hydrocarbons, and particulate matter.

The results of the data collection and analysis showed that 30% of the heavy-duty diesel vehicles measured in the study emitted 10 times or more the expected amount of nitrogen oxides. Light-duty vehicles also had high emitters – approximately 10% had hydrocarbon emissions that were at least 10 times what was expected. The ROVER III study did not include vehicle inspections and therefore cannot give a definitive reason for the high emissions, but they assumed the emission control systems on these vehicles are not functioning as they should. The ROVER III project did not include vehicle inspections so the reason for the malfunctioning emissions control systems was not identified through this work, but possible reasons include manufacturer defects, lack of

maintenance, or tampering. The data collection and analysis were summarized in a report from Opus Inspection Inc., which is available on the CASA website.

The ROVER III Project Team completed a report on their findings in 2024, and it was approved by the CASA board. It included a suite of recommendations aimed at reducing emissions from the transportation sector, with a focus on future work to address data gaps, communication of the impacts of vehicle emission control tampering on human health and the environment, and incentives for fleet owners and operators to maintain emission control systems. The final report and recommendations were publicly released in early 2025.

The data collected through ROVER III was provided to the International Council on Clean Transportation (ICCT), who used it to update the modelling inputs for their Heavy–Duty Emissions Control Tampering in Canada project. The ROVER III data showed the rates of tampering may be different than ICCT had estimated, and therefore the modelled results were probably an underestimate of the impacts of tampering. ICCT will release an update to the study based on the ROVER III data in early 2025.

Funding for this project was generously provided by Alberta Environment and Protected Areas, Alberta Transportation and Economic Corridors, the Canadian Fuels Association, and the ICCT.





# Best Practices Guide for Dust Management in Alberta Project Team

In 2023, a project team was struck to provide guidance that would enable Albertans to reduce and mitigate particulate matter emissions from anthropogenic non-point sources to help improve local air quality management in Alberta and support regional CAAQS achievement.

The project will result in development and dissemination of a best practices guide for dust management that covers anthropogenic activities where particulate matter is involved, considers dust monitoring, and provides references to additional information. Dust sources will include roads, construction operations, and industrial non-point sources, and human health, environmental, and social issues associated with dust and its constituents.

The project team's initial meetings resulted in a request for proposals for a consultant to assist in undertaking the team's tasks, which included:

- a literature review of dust-related best practices guides
- a jurisdictional review of dust management and measurement requirements from relevant municipal, provincial or state, and national jurisdictions

- how dust generation potential can be measured or estimated, how to monitor or measure dust levels, and how to monitor or determine effectiveness of dust control methods
- a workshop to present the results of the literature and jurisdictional review and guide, and to gather feedback on proposed content
- writing the best practices guide

In late 2023, a consultant was selected, but funding was not available for the full cost of the contract. Most of 2024 was spent by staff identifying and securing funding. In late 2024, the City of Calgary provided a \$20,000 grant, and combined with \$60,000 in support from EPA, the project could move ahead, and the consultant contract was signed in December 2024.

In 2025, the team will reconvene and continue its work. It is estimated the project will be completed in spring 2026.

#### Understanding Vehicle Emission Control System Tampering in Alberta Working Group

In September 2024, the CASA board approved the final report and recommendations from the ROVER III project. The ROVER III Project Team identified the magnitude and sources of vehicle emission control system tampering specifically, and the reliability of factory-installed emission control technology in Alberta's climate as information gaps. They recommended that CASA undertake a new project with the following goals:

- identify the magnitude and sources of vehicle emission control system tampering in Alberta, including information gathered about manufacturers, sellers, and installers of defeat devices
- assess the economic impact of vehicle emission control system tampering
- improve the understanding of reliability of factory-installed emission control devices

The working group was struck in late 2024 and will provide draft terms of reference for a project team to the board for decision in early 2025. If approved, a project team will begin work shortly afterward.



# Air & Waste Management Association Conference Committee

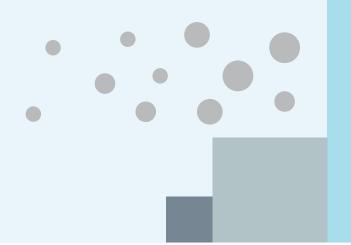
The AWMA hosts an annual conference and exhibition to bring together industry, academia, and policymakers from across North America. In June 2024, the event was held in Calgary.

At the September 2023 CASA board meeting, a small committee was struck to plan how the organization could promote CASA and its work at this event. The committee wrote and submitted three abstracts, identified presenters, and prepared the associated presentations.

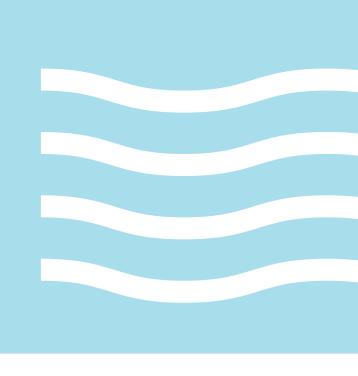
All three abstracts were approved; there were two presentations and one panel session. The presentations were on the Roadside Optical Vehicle Emissions Reporter III project and the Impacts of Reduced Transportation on Air Quality in Alberta Associated with COVID-19 project. The panel session was focused on the use of multi-stakeholder, consensus-based decision making for air quality issues, and featured insights from CASA's executive director and five current or past board members. CASA also had a booth at the exhibition that included information pamphlets, previous project reports, and other materials, with staff and board members available to speak to the organization.

The event had approximately 680 attendees, 200 presentations, 20 panel sessions, 14 topic tracks, and 42 exhibitors. Attendees from CASA appreciated the networking and learning opportunities. The conference, sessions, and exhibit were all shared on social media.

Visit the <u>project page on CASA's website</u> for more information about the committee's work and information on the event.









# Committee, Ad Hoc Group, Working Group, and Project Team Members

The following individuals contributed their time and expertise to CASA's committees, ad hoc groups, working groups, and project teams in 2024. CASA gratefully acknowledges their commitment and support. CASA also thanks the many individuals from various partner groups who reviewed documents, responded to surveys, and volunteered their time in support of our activities.

Alex Martin, Alberta Transportation and Economic Corridors

Andrew Barnes, Alberta Motor Transport
Association

Ann Baran, Southern Alberta Group for the Environment

Bailey Doepker, Alberta Environment and Protected Areas

Bob Koch, University of Alberta

Brent Korobanik, Heidelberg Materials

Cam Lane, Environment and Protected Areas

Cameron Robertson, Alberta Environment and Protected Areas

Chris Yanitski, Alberta Transportation and Economic Corridors

Courtney Brown, Canadian Natural Resources Limited

Craig Siewert, Alberta Transportation and Economic Corridors

Curt Horning, Alberta Environment and Protected Areas

Dan Moore, Alberta Forest Products
Association

Danlin Su, Prairie Acid Rain Coalition

David Spink, Prairie Acid Rain Coalition

Elizabeth Bell, Peace Airshed Zone Association

Geoffrey Wacowich, Alberta Environment and Protected Areas Greg Wentworth, Alberta Environment and Protected Areas

Héline Chow, Environment and Climate Change Canada

Holly Johnson-Rattlesnake, Samson Cree Nation

Jamie Curran, Alberta Environment and Protected Areas

Jennifer Knievel, West Fraser

Jennifer Silverthorn, City of Calgary

Jim Hackett, Heartland Generation

Kamran Faisal, City of Calgary

Kevin Warren, Alberta Airsheds Council

Kristi Anderson, Mewassin Community Council

Kristina Morris, Alberta Airsheds Council

Laura Cline, SIL Industrial Minerals

Lauren Greenhough, Heidelberg Materials

Laurie Cheperdak, Primary and Preventative Health Services

Leigh Allard, Alberta Lung Association

Mandeep Dhaliwal, Alberta Airsheds Council

Melissa Brown, City of Edmonton

Melody Garner-Skiba, Intensive Livestock Working Group

Michael Spiess, Environment and Climate Change Canada

Michelle Meyer, International Council on Clean Transportation

Patrick McDonald, Alberta Environment and Protected Areas

Peter Thomas, Alberta Transportation and Economic Corridors

Rahul Shrivastava, Alberta
Transportation and Economic
Corridors

Randy Angle, Prairie Acid Rain Coalition

Rhonda Lee Curran, Alberta

Environment and Protected Areas

Rob Beleutz, Graymont

Rob Fragoso, Alberta Sand and Gravel Association

Rob Hoffman, Canadian Fuels Association

Ruth Yanor, Mewassin Community Council

Sharon Willianen, Alberta Environment and Protected Areas

Tim Dallmann, International Council on Clean Transportation

Vahid Hosseini, Simon Fraser University

Wally Qiu, Alberta Energy Regulator Warren Noga, Rural Municipalities of

Alberta

Wendy Birch, Alberta Environment and Protected Areas

Yoann Bernard, International Council on Clean Transportation



### In-Kind Contributions

In-kind support is a cornerstone of CASA's ability to address complex air management issues and is extremely valuable in completing its work. Industry, governments, and nongovernment organizations have all provided such support. CASA has tried to assign a dollar value to this but can confidently say the true value of these contributions is both under-recorded and underestimated. The total in-kind contributions of time for 2024 amounted to 4,436 hours. The GoA also generously provided office space as an in-kind contribution in 2024. The chart below shows the in-kind cash equivalent contributions from the three broad sector groups.

Cash contributions are also critical to the success of the organization. CASA gratefully acknowledges EPA for ongoing operational funding, as well as additional project team funding to support the work of the Best Practices Guide for Dust Management in Alberta Project Team. And, sincere thanks to the Alberta Forest Products Association for sponsoring our annual recognition event.

#### 2024 In-Kind Contributions





## Alberta Airsheds Council and Alberta Airsheds

CASA would like to recognize our mutually beneficial working relationship with the Alberta Airsheds Council (AAC) and its members, Alberta's 10 Airshed organizations. The primary role of the Airsheds is the monitoring, assessing, and reporting of ambient air quality, and together they operate most of the monitoring stations in the province. Airsheds are also actively involved in education and community outreach and help raise awareness and understanding of the benefits of healthy air quality; they often support initiatives that address local air quality issues. While the AAC and CASA are not formally affiliated, Airshed representatives often contribute valuable knowledge and expertise to CASA's project teams. Their partnership and in-kind support is greatly appreciated.

Notably, the AAC releases an annual Air Quality Report to provide a summary of the air quality data monitored and collected in the province by Alberta's Airsheds. The Air Quality Reports are a valuable resource and available <a href="here">here</a>.









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