

and Indigenous communities to share information, identify air quality concerns and gauge interest in joining PRAMP.

We also collected data about production, flaring, venting and other air monitoring in Northwestern Alberta to better understand where there may be a need for or interest in air quality monitoring. We will continue to review our boundaries in late 2019.

#### NEW METHANE CANISTER COLLECTION

In 2019, PRAMP responded to higher values of methane at the Reno site in comparison to the 986 and 842 stations. We began collecting additional air samples at the Reno, 986 and 842 stations to more accurately assess the source(s) of the methane, and to better understand any non-methane compounds that may be present when methane levels are elevated. The methane canisters will be collected at the end of the year and information from lab results will be shared on our website [prampairshed.ca](http://prampairshed.ca).

### Ensuring a Healthy Environment for our Community

#### PRAMP BOUNDARY REVIEW

Original PRAMP boundaries included Seal, Walrus, Three Creeks and Reno areas. These were set through recommendations from the Alberta Energy Regulator in 2014. Unlike other Alberta Airsheds, PRAMP boundaries are currently discontinuous and monitoring gaps exist in areas.

In 2018-2019, PRAMP began a boundary review by contacting nearby municipalities

### Thank You PRAMP Members & Supporters

#### GOVERNMENT

- Alberta Energy Regulator
- Alberta Environment and Parks
- Alberta Health Services
- Alberta Health
- Boreal Research Institute
- Region 6 Métis Nation
- MD of Smoky River
- Northern Sunrise County
- Town of Falher
- Woodland Cree First Nation

#### COMMUNITY

- Public Members

#### INDUSTRY

- Baytex Energy
- Obsidian Energy
- CNRL
- Tervita

### Board of Directors

#### Reid Glenn

Co-chair, Community

#### Garrett Tomlinson

Co-chair, Government

#### Anthony Traverse

Co-chair, Industry

#### Shelly Shannon

Secretary/Treasurer  
Community

#### Doug Dallyn

Director, Community

#### Kevin Kemball

Director, Community

#### Art Laurin

Director, Industry

#### Krista Park

Director, Government

#### Jenna Strachan

Director, Industry

#### Elvis Thomas

Director, Government

#### Andy Trudeau

Director, Government

#### Corinna Williams

Director, Government

### Contact Us

Visit our website [prampairshed.ca](http://prampairshed.ca) for live air quality data, resources and updates. Sign up for our newsletter.

#### Karla Reesor, Executive Director

[karla@prampairshed.ca](mailto:karla@prampairshed.ca)

#### Michael Bisaga and Lily Lin, Technical Program Managers

[pramptech@prampairshed.ca](mailto:pramptech@prampairshed.ca)

Follow us on Twitter and Facebook  
[@prampairshed](https://twitter.com/prampairshed)



Monitoring emissions and air quality to ensure a healthy environment in the Peace River Area. Download the AQHI Canada app.



## New Initiatives Add Value

It has been a year of planning and building for PRAMP and we are on a path to provide even more valuable information to our communities and stakeholders in the year ahead. We are very pleased to report on the reductions in emissions, flaring and venting over the past several years and look forward to sharing even more air quality information in the year ahead.

With a new Air Quality Health Index (AQHI) station deployed in the late summer of 2019, the Peace River area will join the other 37 communities in Alberta with AQHI information readily available. Residents in the area will be able to access current and forecasted air quality conditions and make informed choices about outdoor activities.

At the same time, PRAMP is preparing to increase its education and outreach programs by hiring a part-time local coordinator to work with area schools and community groups.

We are also excited to grow and enhance our data reporting, and we anticipate that new communities may also want to become involved.

New technology is emerging that may make it possible to provide more air monitoring at a much lower cost. We will be testing new devices in the year ahead, and will invite our stakeholders to track the results in real-time with us. We look forward to staying informed about potential opportunities for more communities to have access to air quality information.

Our staff and Board have been laying the groundwork this year for these additional initiatives. It will be an exciting year ahead with new monitoring, new people joining our team, and potential involvement of new communities.

**Reid Glenn, Garrett Tomlinson  
and Anthony Traverse**  
PRAMP Board Co-chairs

#### Why Does PRAMP Have Three Co-Chairs?

This reflects our commitment to collaboration and the importance of representation from industry, community and the government. We believe we have better results by working together.



NEW AQHI STATION

The first location for PRAMP’s new AQHI Station was selected in Woodland Cree area (Reservation areas along highway 986). Our Technical Program Managers and Technical Working Group used a multi-step assessment process that considered community interests and concerns to determine the location of the station.

Factors included: data gaps where there is little or no monitoring information; existing air quality issues from within or outside of PRAMP where there may be a need for more comprehensive data; requests from government agencies or industry members; and issues raised by the general public, groups, agencies and other organizations.

PRAMP had been aware of the air quality concern in the Woodland Cree area for some time, but had previously not been able to address it due to the ‘fixed’ nature of the existing regional air quality monitoring stations. The new AQHI station now allows for monitoring in the area and AQHI reporting.



Understanding Air Quality and Health  
WHAT IS THE AQHI?

To help Albertans understand how air quality impacts human health and the actions people can take to protect their health, the province uses the Air Quality Health Index (AQHI) as part of its air quality reporting system.

The AQHI provides a number from 1 to 10 to indicate the level of relative health risk associated with local air quality. The higher the AQHI number, the greater the health risk and need to take precautions.



AIR POLLUTANTS AND AQHI

The AQHI represents the relative risk of a mixture of three air pollutants which are known to harm human health.

- **Ground-level Ozone (O<sub>3</sub>):** Created by chemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOC). This happens when pollutants emitted by cars, home heating, industrial facilities, refineries, chemical plants, and other sources chemically react in the presence of sunlight.

Ozone is most likely to reach unhealthy levels on hot sunny days in urban environments. Ozone can also be transported long distances by wind, so even rural areas can experience high ozone levels.

- **Fine Particulate Matter (PM<sub>2.5</sub>):** A mixture of tiny airborne particles that can either be emitted directly by vehicles, industrial facilities, natural sources like forest fires, or formed indirectly as a result of chemical reactions among other pollutants.
- **Nitrogen Dioxide (NO<sub>2</sub>):** Nitrogen dioxide is released by motor vehicle emissions and industrial processes that rely on fossil fuels. It is often elevated in the vicinity of high traffic roadways and local industrial sources.

These three pollutants can threaten human health even at low levels of exposure and especially among those with health problems. Visit [alberta.ca/air-quality.aspx](http://alberta.ca/air-quality.aspx) for more information.

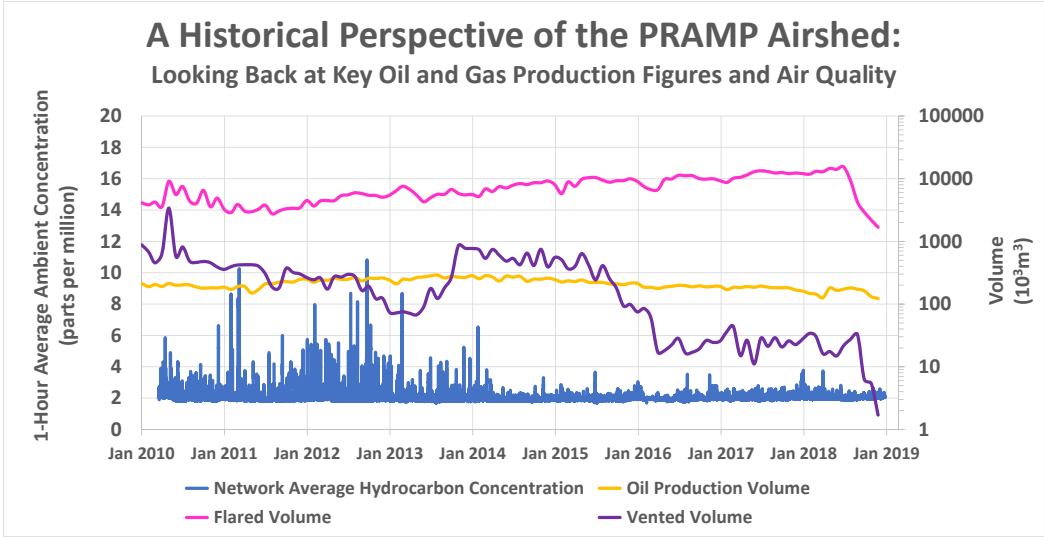


HEALTH EFFECTS OF FINE PARTICULATE MATTER

Fine particulate matter can be 30 times smaller than the width of a human hair. The smaller size of fine particulate matter allows it to penetrate deep into the lungs and can cause:

- Aggravation of asthma, lung or heart disease in people who already suffer from these problems
- Difficulty in breathing in children and the elderly
- Irritation of eyes, throat, skin and nose

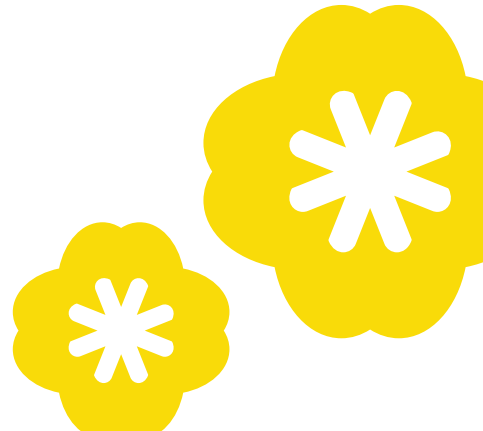
People with heart or lung disease, older adults and children are considered at greater risk from particles, especially when they are physically active. Exercise and physical activity can cause people to breathe faster and more deeply and to take more particles into their lungs. Use the AQHI to determine when to limit your exposure to air pollution and adjust your activity.



AIR MONITORING RESULTS

In addition to collecting air monitoring data from the PRAMP stations, data has been compiled on oil production, flaring and venting. While oil production has declined slightly since 2010, the controls that have been put in place by operators have resulted in a dramatic decline in hydrocarbon emissions, as well as flaring and venting volumes.

Looking at these elements together highlights the significant improvements in air quality in the Peace River area and in some cases, the products that were previously vented or flared, are now recovered for use in the energy production process. We still see some occasional spikes in the data, and we will continue to review the air monitoring results on a daily, weekly, monthly and annual basis to support ongoing healthy air quality.



PRAMP Summary of Revenue and Expenses

April 1, 2018 to March 31, 2019

REVENUE

Oil Sands Monitoring Service	982,885.13
Education and Outreach Grant	49,000.00

<b>Total Revenue</b>	<b>1,031,885.13</b>
----------------------	---------------------

EDUCATION AND OUTREACH GRANT EXPENSES

Promotional Items	2,749.55
-------------------	----------

<b>Total Grant Expenses</b>	<b>2,749.55</b>
-----------------------------	-----------------

Monitoring Expenses	66,901.00
Station Management	316,380.00
Capital Equipment	264,736.00
Program Management	171,600.00
Report Production	41,720.00
Communication	18,014.00
Society (Office) Management	103,534.00

<b>Total Contract Expenses</b>	<b>982,885.00</b>
--------------------------------	-------------------