

# THE ZONE

## Air Quality in Red Deer Needs Improvement

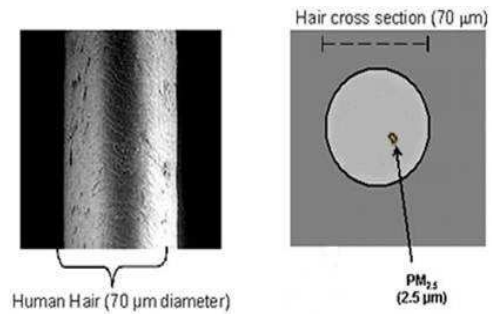
Air quality in Red Deer is exceeding the PM<sub>2.5</sub> Canada Wide Standard (CWS) and needs to be improved. These are two conclusions of a recent assessment of PM<sub>2.5</sub> and Ozone levels throughout Alberta from 2009-2011 conducted by Alberta Environment and Sustainable Resource Development (AESRD). The Red Deer measurements were made at PAMZ's Riverside Drive Air Quality Monitoring Station.

PM<sub>2.5</sub> is airborne particulate matter less than 2.5 micrometres in diameter, small enough to enter lungs, making it a human health concern. (See diagram on right for scale). It can also be a significant contributor to smog conditions.

The assessment concluded the elevated PM<sub>2.5</sub> levels in Red Deer were caused primarily by human made emissions (e.g. automobiles and industry) combined with a higher than normal frequency of stagnant weather conditions during the winters of 2010 and 2011. The measurements also followed a change of monitoring technology for PM<sub>2.5</sub> in 2009 that resulted in higher, but more accurate measurements.

As a result of the assessment, under a management framework developed by the Clean Air Strategic Alliance, it is AESRD's responsibility to develop a mandatory plan within two years to reduce PM<sub>2.5</sub> concentrations below the CWS.

AESRD recently began notifying affected stakeholders in the



region requesting their participation. PAMZ will also participate in the development of the PM<sub>2.5</sub> reduction plan.

*"While air quality in Red Deer is usually very good, there are occasions on cold winter days when it's not. PAMZ is committed to working with other stakeholders on reducing PM<sub>2.5</sub> emissions and continuing to enhance our monitoring program for measuring them",* says Kevin Warren, PAMZ Executive Director.

AESRD's assessment concluded that 2009-2011 Ozone levels were within a surveillance action level. PAMZ is currently in the fourth year of implementing its Ozone Management Plan with the goal of preventing ozone levels from approaching the Canada Wide Standard.

## PAMZ Monitoring Air Quality at a Second Red Deer Site



The Parkland Airshed Management Zone (PAMZ) recently began monitoring air quality at a temporary site located at the Lancaster Reservoir in southeast Red Deer.

A permanent AQM Station has been located alongside Riverside Drive since

2000 near Three Mile Bend Park in the Red Deer River Valley. With the recent relocation of the City of Red Deer Civic Yards nearby and

other industrial growth in the Riverside Industrial Park, a second permanent site is being sought that provides a better indication of the air quality typically experienced by the majority of Red Deer residents

PAMZ's David McCoy AQM Trailer (pictured on left) was installed at the Lancaster site in late November and will remain there through March 31 to characterize wintertime air quality. More monitoring at the site may be undertaken later this year to measure summertime air quality.

While the David McCoy AQM Station is located at the Lancaster Reservoir site, air quality data collected by the station can be accessed and viewed at [www.pamz.org](http://www.pamz.org).

### UPCOMING EVENTS

For more information visit [www.pamz.org](http://www.pamz.org)

**Earth Day**  
Sunday, April 21  
12:00 pm - 4:00 pm  
Kerry Wood Nature Centre, Red Deer

**Eco Living Fair**  
Saturday, April 6  
10:00 am - 5:30 pm  
Red Deer College  
For more information, go to: [www.EcoLivingEvents.ca](http://www.EcoLivingEvents.ca)

**Air Quality Issues Identification Meeting**  
Wednesday, May 15.  
6:00-9:00 PM  
Didsbury Train Station,  
1811-20 Street, Didsbury

**Clean Air Day**  
Wednesday, June 5  
PAMZ Action HERO Awards presentation will take place. Time and place TBA on [www.pamz.org](http://www.pamz.org).

**Environment Week**  
June 3-7  
PAMZ, working with its partners is hosting a **Vehicle Emissions Testing Clinic, June 7 and 8** at the Parkland Mall, Red Deer

## Municipal Survey on Idle Free Policies

In November, 2012, The Parkland Airshed Management Zone (PAMZ) conducted a survey among municipalities outside the City of Red Deer in the PAMZ region. The survey was to determine what policies or bylaws municipalities had in place to reduce idling of vehicles within their jurisdictions. We received 15 responses from villages, towns, cities and counties in the PAMZ region.

Feedback indicated that enforcement seemed to be the major reason for many municipalities not developing idle free policies or bylaws. Nevertheless a few towns (e.g. Sundre, Rocky Mountain House) did have active policies in place to reduce idling.

Olds, in particular, has done considerable work on this topic by developing an Idle Reduction Strategy in 2010. They concluded that that education and awareness, rather than legislation, was the best way to inspire change. Some examples of actions Olds considered were:

- Developing educational material - fact sheets, brochures, newspaper articles, radio ads, promotional material such as stickers and posters.



- Partnering with driving schools to inspire the promotion of idling reduction among new drivers.

- Holding idling reduction campaigns at places where idling occurs, such as gas stations.



- Partnering with environmental clubs at schools and Olds College to offer material and assistance on running effective campaigns.

- Partnering with businesses such as trucking firms that operate in Olds to offer educational material on the cost effectiveness of fleet management.

- Delivering educational material and learning opportunities in relevant settings and in an engaging environment .

- Delivering material in conjunction with other relevant campaigns.

While there is some good work being done by municipalities, the survey indicates there is still much that can be done. We know that vehicle exhaust is a major contributor to air pollution and PAMZ's data supports this.

Clean Air Day is coming up on June 5, which provides an ideal opportunity for municipalities to start launching an idle free awareness program in their communities. We encourage municipalities to look at some of the ideas other communities are considering or go on line to [www.pamz.org](http://www.pamz.org) see how your community can play a role in reducing vehicular idling.

## New National Air Quality Management System

Federal, provincial and territorial environment ministers recently approved a new comprehensive Air Quality Management System (AQMS) intended to further protect the health of Canadians and the environment with measures to improve air quality throughout Canada.

The AQMS will assist jurisdictions to ensure good air quality outcomes while maintaining competitiveness in all regions of Canada. The new system builds on measures that jurisdictions already have in place, allows for regional-based responses and helps coordinate the actions of federal, provincial and territorial governments in dealing with air quality issues.

The new system was approved at a meeting of the Canadian Council of Ministers of the Environment (CCME) hosted by Alberta in Lake Louise on October 11, 2012. The AQMS includes:

- Standards for outdoor air quality management across the country.
- Industrial emission requirements for major industries in Canada.
- A framework for air zone management within provinces and territories that enables actions tailored to specific sources of air emissions in a given area.

- Regional airsheds that facilitate coordinated action when air pollution crosses a border.
- An intergovernmental working group to improve collaboration and develop a plan to reduce emissions from the transportation sector.

The AQMS framework for air zone management borrows heavily from Alberta's experience with its fine particulate matter and ozone management framework and regional airshed management zones such as PAMZ. At the October meeting the CCME also agreed on new more stringent standards for fine particulate matter and ozone, the two main components of smog. Work has also begun on new standards for sulphur dioxide and nitrogen dioxide.

The AQMS will include monitoring and reporting of outdoor air quality conditions and emissions from major industrial sources in Canada. Over the next year, the CCME will continue to work together to improve the environment by addressing water, air and waste issues. The next meeting of CCME will be hosted by Nunavut.

For more information on AQMS, visit: [www.ccme.ca/about/communiques](http://www.ccme.ca/about/communiques)

# PAMZ Announces 2013 Photo Contest Winners

The 3rd annual PAMZ photo contest received 46 great entries. The categories were Atmosphere, Nature, Urban, Industry, People and Youth (all categories) with the theme this year being “The Good, Bad and the Ugly.” As we did not receive any entries for the “People” category, we added second runner ups for the categories of Atmosphere, Nature and Industry, where most photos were entered. All the photos were wonderful and it was a tough decision for the judges. We thank everyone who entered and invite you to look at the winning photos below and on our website at [www.pamz.org](http://www.pamz.org)

## Atmosphere

1st Place



Marilyn Phillips - Tornado touch down

Runner Up



Sharon Blain – Lightening out of a storm

Runner up



Robin Fair – Low pressure event

Urban—1st Place



Cameron Eng – Alpha Plant, downtown Red Deer

## Industry

1st Place



Amber Maschke - Pioneer Grainery, Olds

Runner Up



Paul Boger – Oil rig –Harmattan

Runner Up



Amber Maschke – Pump jack at sunset

Urban– Runner Up



Thomasina Payne – Tree saved from destruction

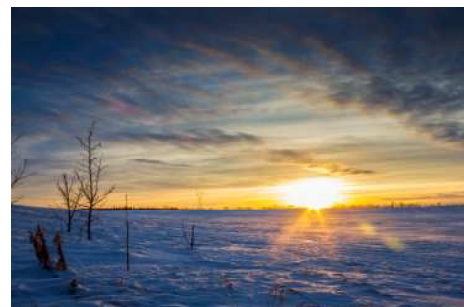
## Nature

1st Place



Marilyn Phillips – Fox hunting mice

Runner up



Cameron Eng – Sunset over snow field

Runner up



Ron Blain – Hoary Marmot

Youth- 1st Place



Ashley Parker – Pink Echinacea flower

Youth



Runner up

Darine Pagan – Ice on sunflower

# Want to Join the PAMZ Communication Committee?

Wondering who manages all the communications and community outreach activities for PAMZ? It's the PAMZ Communication Committee. Their job is to market and promote PAMZ activities, inform the public about air quality issues and increase public awareness and participation in air quality issues through education and public involvement processes. These committee members come with considerable experience in public affairs and working with communities. They are a creative bunch who bring initiatives like the photo contest, educational programs and interesting ways to participate in and partner with communities.

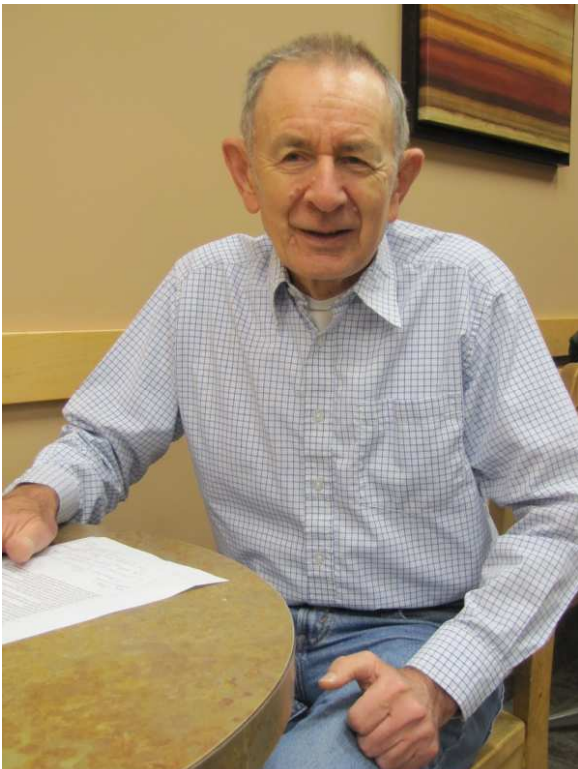
The committee includes Kevin Warren, Executive Director, PAMZ; Lauren Maris, Environmental Program Specialist, City of Red Deer; Phil Boehme, Planner, Alberta Environment and Sustainable Resource Development; Marcie Nieman, Community Affairs Representative, Shell Central Alberta and Ryan Smith, Environmental Planner, Shell Canada.

The committee is looking for other creative people who would like to be part of the group. In particular, they are seeking youth representation (high school or college students) and members from the public and non-governmental organizations for the committee. If you are interested, please contact Sue Arrison at [sue@pamz.org](mailto:sue@pamz.org) or call 403-342-5816.



*From left to right: Kevin Warren, Executive Director of PAMZ; Lauren Maris, Communication Committee Chair, City of Red Deer; Phil Boehme, Alberta Environment and Sustainable Resource Development and Marcie Nieman, Shell Canada. Missing is Ryan Smith from Shell Canada.*

## Member Profile— Jim Saltvold



**Meet Jim Saltvold**, a member of the PAMZ Technical Working group since 2010 and now a new member of the PAMZ Board.

A native Albertan, raised on a farm near Meeting Creek, Jim comes to PAMZ bringing considerable professional and technical experience. He graduated from the University of Alberta with a Master's degree in Electrical Engineering and took his first job working at CIL's polyethylene plant in Edmonton.

For the next 39 years, Jim worked for Atomic Energy of Canada Ltd (AECL) at the Whiteshell laboratories in Pinawa, Manitoba and the laboratories in Chalk River, Ontario. His primary work was designing special purpose instrumentation and experimental facilities for research related to nuclear safety and materials used for nuclear reactors. After AECL, Jim moved to Red Deer where he worked part time for Stantec Engineering for three years before retiring.

Jim has been married to his wife, Roberta for 43 years and has two sons. He enjoys cycling, gardening and cross country skiing, and lives in his newly built energy efficient home in the Lancaster neighbourhood of Red Deer.

*"The reason I joined PAMZ is I wanted to use my technical experience to help improve our environment. I also enjoy working with people with similar backgrounds. The Board and Technical Working Group are a nice bunch, very keen and professional," says Jim.*

PAMZ is fortunate to have people like Jim.

## July 1st Deadline for the \$2500 Martha Kostuch High School Graduate Scholarship

The Martha Kostuch Scholarship for \$2500 is given annually to a deserving student(s) in recognition of outstanding environmental service and leadership as a student, as well as their potential for future achievement in environmental stewardship and/or environmental leadership.

Any full-time student who has an interest in further studies in environmental issues and is currently graduating from a high school in the PAMZ region may apply. (Please see the PAMZ website at [www.pamz.org](http://www.pamz.org) for a map of the region).

Scholarship recipients may use the award to defray necessary expenses of advanced education, such as tuition, living expenses, books or supplies. For more information about application requirements, please go to [www.pamz.org](http://www.pamz.org) or contact [sue@pamz.org](mailto:sue@pamz.org)