



**PAMZ** | Parkland Airshed  
Management Zone

**Minutes:** Technical Working Group Meeting  
**Date:** September 20, 2013  
**Location:** AER Boardroom, # 202, 4909 - 49th Street, Red Deer

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Participants:

Shaminder Cheema - NOVA	Jeff Cooper - Focus	John Cuttress - Focus
Lenin Flores - Focus	Brian Goliss - Shell	Warren Grimes - ESRD
Shane Lamden - NOVA	Colin Long - Keyera	Dale Nylund –Altagas
Darren Robins – Imperial Oil	Jim Saltvold - Public	Reg Watson – Public
Kevin Warren - Amarok		

**Bolded Items are Action Items**

1. The meeting was called to order by Brian Goliss in Aaron Rognvaldson's absence, at 0905 hrs
2. All attendees introduced themselves.
3. The agenda was reviewed and accepted with the additions Issues Response Group 2014 Siting Recommendations, ESRD Reorganization Update and Draft 2014 Funding Allocations under other business.
4. The minutes of the June 14, 2013 meeting were accepted.
5. The status of action items arising from the June 14, 2013 meeting was reviewed.

Jon to provide Kevin with copies of the site documentation for all 2012 and 2013 portable monitoring sites. **DONE** Kevin has approved new template for station documentation. Focus is providing updated documentation as new sites are added.

Kevin will enter into discussions with AESRD about proposed changes to the PAMZ AQM Program. **CARRY FORWARD** Have not met with Bob Myrick before September meeting.

Kevin will have Sharon generate a THC windrose for concentrations greater than 2.5 ppm to help identify potential sources. **DONE** Will be reviewed under program discussion

Aaron and Kevin will summarize the risks and consequences discussion into a table to be presented to the board at their June 19 meeting. **DONE** Modified since Board meeting will be presented under program changes discussion

The TWG will reassess the proposed program changes at its September meeting. **ON**

## AGENDA

### 6. PAMZ AQM Program

Kevin has been very impressed with performance of Focus over the summer

- minimal downtime
- good communication
- good leadership
- good decision-making by staff and management

There were some issues with Telus changing IP addresses that made it difficult to review station data at times. These issues have been resolved.

Kevin received a letter of closure from Al Clark on 2013 Audit on July 16. Summary of Actions Taken:

#### Riverside Wind Direction

Wind data collected from the sensor's installation on February 23 through the ESRD Audit on June 18, 2013 has been invalidated. The windhead was improperly oriented and it was not possible to correct it. The May 2013 Report reflects this (ESRD Ref # 272021) and the February, March and April 2013 wind data has been resubmitted to the CASA Data Warehouse.

#### Didsbury West Direction

Wind direction data collected from the station's installation on June 3 through the EDRD Audit on June 20, 2013 has been corrected to account for the misaligned windhead.

**Caroline** – Nothing outside of historical normals.

**Red Deer Riverside** – some low level H<sub>2</sub>S (5 ppb avg, 6 ppb max), SSE winds verified by Focus. Removed station out of service for 5 days in June because of flooding concerns. New PM<sub>2.5</sub> analyzer installed July 29-30. Data being reported from Sharp and stored from TEOM. Internal temperature channel utilized for TEOM data. Good correlation so far. Expect any differences to be seen in cold winter months. All else normal

#### McCoy

**Eagle Hill** (April 2013) – Kevin had Sharon Whiteley produce pollutant roses of THC levels greater than 3 ppm. AER conducted a monitoring survey September 4 with their FLIR Camera and correlated their observations to those indicated in the pollutant roses.

AER inspected 6 O&G sites closest to the site on September 04, and there were three that had emissions. All the inspections were on sweet sites and there were no non compliances. AER also drove around the surrounding area looking for other possible sources of hydrocarbon emissions and found none.

#### Sylvan Lake May 2 – July 3

There were seven hourly TRS exceedences and one 24-hour TRS exceedence since the June 14 meeting.

TRS Exceedences June 17, 2013.

0300-0400 11 ppb WS 2 km/hr WD 127 degrees SE

0400-0500 18 ppb WS 2 km/hr WD 131 degrees SE

TRS Exceedences June 24, 2013.

0200-0300 22ppb WS 1 km/hr WD 89 degrees E

0300-0400 20 ppb WS 1 km/hr WD 104 degrees E

0400-0500 12 ppb WS 1 km/hr WD 138 degrees ESE

0500-0600 15 ppb WS 1 km/hr WD 166 degrees SSE

0600-0700 11 ppb WS 2 km/hr WD 66 degrees NE

0000-2400 3.4 ppb WS 3 km/hr WD 135 degrees SE

Town's sewage treatment ponds 1 km north and there is cattle feedlot 2 km south southeast. The directions and timing of the exceedences suggest that the wetlands to the immediate southeast of the monitoring site are the source of the exceedences.

### **Crossfield Carstairs – July 3- Present**

Levels within historical normals on most parameters

There were three TRS exceedences Aug 4-5

2300-2400 21 ppb W 10 km/hr

0200-0300 41 ppb WSW 6 km/hr

0300-0400 36 ppb WNW 9 km/hr

No obvious source of the exceedences, as the TAQA Crossfield Plant is to the SSW,

PAMZ aid for two extra loads of gravel to access road (wet weather in June caused road to sink, 3-4 loads last year)

### **MARTHA**

Everdell (April)

The group reviewed pollutant roses for THC readings > 3ppm and the FLIR Camera video provided by AER from a monitoring survey conducted August 1, showing venting at various locations within the Imperial Everdell facility, however there was no formal report to put the video observations in context

**Kevin will follow up with AER to get a more formal report of the Everdell FLIR survey.**

### **Didsbury West (June)**

No elevated hydrocarbon levels were observed. All levels within PAMZ historical normals. Resident feels that the O&G company operating the batteries around her residence upon seeing or hearing about AQM monitoring began listening to her and addressing her concerns. Very pleased with PAMZ and its impact and donated her power reimbursement (about \$320) to PAMZ.

### **Lancaster Park – July 8 - Present**

Higher levels of H<sub>2</sub>S observed at this site than at Riverside, tripping warning level 6 ppb at times and one TRS exceedence has been recorded to date. (11 ppb Aug.18 south winds). Most

readings are associated with Southerly winds in the morning with calm or light winds. Jim Saltvold who lives close by the station has not smelled any no odours, and no complaints called to ESRD. Strongest suspected source are wetlands on southern periphery of City limits.

PAMZ has received funding \$47K from ESRD to run ERD PAML at site through March 31, 2014. Two payments December 31 interim Report and March 31 final report (As of end of Feb). Focus to make arrangements with ESRD MacIntyre to have station on site at Lancaster site week of October 7. A number of concerns were raised with the use of the ESRD PAML station.

- 1) Residents in the area are sensitive to the aesthetics of the trailer, and the PAML is larger than the trailer that is there now. As well, the approval from the City of Red Deer for the site specifies dimensions of the station.
- 2) The PAML has a different type of PM monitor than what PAMZ is currently using, which would make it impossible to compare future data with that collected to date.
- 3) The data logger is also different.
- 4) There would be some down time if the PAML were put in to the site.

Three months have now opened up on the portable schedule, since a) the resident at Didsbury is satisfied and does not feel the need for further monitoring at her property, and b) the resident at Louis Lake changed his mind.

**In view of the concerns about the use of the ESRD PAML, and the freed up spots on the 2013 monitoring schedule, it was agreed that Kevin will contact ESRD to see if the monitoring at Lancaster can be done using the Martha Kostuch Station currently at the site. If so, Kevin will adjust the schedule for the last 3 months of 2013 to be:**

	Martha		McCoy
13-Oct	Red Deer Lancaster Reservoir	13-Oct	Eagle Hill
13-Nov	Red Deer Lancaster Reservoir	13-Nov	Rocky Mountain House
13-Dec	Red Deer Lancaster Reservoir	13-Dec	Everdell

**Kevin will apply to City for an extension of the current temporary permit or a permanent site approval and report back to TWG at next meeting.**

**Passives** – Normal patterns and levels. 3 sites ran June-July as they couldn't be accessed because of flooding.

#### O3 and PM2.5 Management Plan

Nothing further from ESRD on PM2.5 plan. Fiona Sleissor at ESRD who was heading up development of PM2.5 & Management Plans transferred, Andrew Clayton trying to find out who now responsible. Kevin and others including the City of Red Deer, are pushing for a stakeholder organizational meeting later this fall.

#### 7. PAMZ AQM Program Future Changes

The Risk and Consequences Document of proposed program changes developed at the last meeting and finalized by Kevin and Aaron was reviewed.

### Ozone Passive Monitoring program

- Discontinuation of the O3 passive monitoring program was discussed
- Ozone passives affected by natural background, stratospheric and anthropogenic ozone
- Areas with higher concentrations generally located in remoter areas of PAMZ and not related to human activity, populated regions show lower levels
- Air quality objectives and CWS/CAAQS are based on short term exposure to peak levels – hourly and 8-hour averages only
- Passives do not provide data for short-term exposure
- Dropping O3 passives would reduce analysis costs from \$72K to \$47k, a savings of \$25K
- No savings to changeout costs as all stations would still need to be changeout monthly and time savings per visit will be minimal

### Portables Continuous Monitoring Program

- Martha monitoring station responsive to issues of concern to zone stakeholders unique feature of PAMZ Program
- The McCoy station was added after start of program
- Spends ¼ of Each year at Crossfield
- 12 years of data, CRAZ now in existence and TAQA Crossfield monitors SO2 and H2S at two nearby locations
- Geographic monitoring could be assigned to Martha for 2 of 6 sites per year or dropped completely
- Technical issues could be treated as special projects with PAML & Funding applied for from AESRD
- Station could be permanently located at 2nd Red Deer Site (Lancaster) and operating funds obtained through contract from AESRD
- Or station could be rented out privately or to other monitoring organizations and generate revenue (\$4K per month)
- Continuous Monitoring Program - \$407,432 + \$27,268
- Caroline \$71,880 + \$13,865 = \$85,745
- Riverside \$85,308 + \$13,865 = \$99,173
- Caroline & Riverside Permanent Stations and considered part of Provincial AAQMS – data used for AQHI, CWS/CAAQS and SOE Reporting
- Martha \$100,740 + \$9,000 + \$13,865 = \$123,605
- McCoy \$78,444 + \$6,600 + \$13,865 = \$98,909
- Dropping O3 passives and reassigning McCoy Station would result in slight cost decrease (-0.4%) for large facilities in 2014

**Kevin will prepare a number of scenarios that look at the use of the Martha portable as a permanent station at Lancaster Park and various uses of the McCoy portable and present this to the group at their 2014 budget deliberations at the November meeting.**

### 9. Other Business

#### August Public Issues Identification Meeting – 2014 Monitoring Locations

Kevin reported that the IRG met August 14 to discuss monitoring locations for 2014. No new issues requiring air quality monitoring have emerged since the public meeting in Didsbury. The IRG used recommendations from that meeting and complaint logs from AER, ESRD, NRCB, and SPOG to identify monitoring locations. It was noted that the number of complaints for odour and other issues seemed to be lower this year. The top three sites proposed by the IRG were:

- H2S odours associated with the Crossfield gas plant

- Oil and gas development in the Rocky Mountain House area
- Johnston residence north of Sundre (battery loading and uploading issues).

The second tier included follow up at the Delburne site for SO<sub>2</sub>, and the Linden area (wintertime smog). The third group was Kuusamo Industrial Park and Highway 2 transportation corridor.

#### ESRD Reorganization

The impact of the ESRD reorganization on PAMZ was discussed. The Red Deer Division is now part of a larger central division that includes Edmonton, Drayton Valley and Fort Saskatchewan. The new regional director is Randall Barrett. There was no clear consensus on how the reorganization could affect PAMZ as it is still in progress. A number of key ESRD staff have taken positions with AER.

#### 2014 Funding Allocations

Kevin presented a draft funding allocation assuming no changes in budget revenue needs for 2014 using the 2012 EPEA plant Emission Data. Shell's Burnt Timber Plant is slated to close down sometime in 2014 and this could have a significant effect on future and funding and supports the need to investigate options for program changes that would reduce funding need from the membership.

#### 10. Upcoming Events

- AAC Meeting Canmore Monday Sep 23
- PTAC Multigas Passive Sampling Technology by AGAT Laboratories Technical Information Session, Monday, Sep 23, 2013, 11:30 AM - 1:30 PM, Nexen Annex Theatre (+15 level), 801 - 7th Ave SW, Calgary, AB
- CASA Odour Management Project Team Tues, Sep 24, Calgary
- CRAZ Presentation at Board Meeting Sep 25
- PTAC 2013 Air Issues Forum, Sep 26 Thurs, 2013, 8:00 AM - 5:00 PM, The Calgary Petroleum Club, 319 - 5th Ave SW, Calgary, AB
- CRAZ 2-day Air Quality Workshop MacEwan Centre, U of C Oct 7 830-3, Oct 8 830-4
- Synergy Alberta Conference and Convnetion, Red Deer Oct. 28-30

#### 11. Next Meeting

The next meeting of the TWG will be November 22, 2013 9-12 at the Red Deer AER office. Provision will be made for teleconferencing from Calgary Midnapore AER office.

#### 12. Adjournment

The meeting was adjourned at 1138 hrs.