



PAMZ | Parkland Airshed
Management Zone

Minutes: Technical Working Group Meeting
Date: November 22, 2013
Location: AER Boardroom, # 202, 4909 - 49th Street, Red Deer
AER Videoconference Room. 300, 31 Sunpark Plaza SE, Calgary
AER Videoconference Room, Drayton Valley Office

Participants:

Noor Alif, ESRD	John Cuttress - Focus	Al Duben, AER
Lenin Flores - Focus	John Grant - AER	Colin Long - Keyera
Aaron Rognvaldson - Husky	Jim Saltvold - Public	Pervez Sunderani - ESRD
Reg Watson – Public	Kevin Warren - Amarok	

Bolded Items are Action Items

1. The meeting was called to order by the chair, Aaron Rognvaldson, at 0902 hrs
2. All attendees introduced themselves.
3. The agenda was reviewed and accepted with the additions of Ozone Management and PM2.5 Reduction Plan Update under other business. Results of the previous day's Focus 2013 Performance Review were discussed under program summary
4. The minutes of the September 20, 2013 meeting were accepted.
5. The status of action items arising from the September 20, 2013 meeting was reviewed.

Kevin will enter into discussions with AESRD about proposed changes to the PAMZ AQM Program. **DONE Discussed under Program Summary**

Kevin will follow up with AER to get a more formal report of the Everdell FLIR survey. **DONE** there is no formal report.

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. **DONE** ESRD agreed to allow PAMZ to use the Martha Station for the Lancaster Monitoring and to fund it from October 2013-2014. The McCoy monitoring schedule was changed as per discussion. The City issued an extension of the development permit through the end of March 2013.

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. **DONE** Based on discussions with executive the budget is based on only one scenario that assumes the Martha station will be permanently located at the Lancaster site from July 2014 on. Discussed later in meeting under 2014 Budget.

Kevin will meet with Red Deer Environmental services to discuss their provision of the Lancaster monitoring site as a permanent site.

The TWG was also tasked with two action items at the September 25 Board Meeting.

75.2: The TWG will ask AER to explain how they would determine if a facility is compliant or not when using their FLIR. **DONE** On the Agenda

75.3: The TWG will consider the comments from the stakeholder survey and how to respond. **DONE** Regarding the comments on odour, PAMZ does monitor some odours but expanding the program with an odour focus is not an option at present as such programs are very specialized and costly. When the source of an odour is unknown, PAMZ can get involved; our analyzers do not measure intensity, but components of the odour can be identified and analysis can reveal potential correlations. Also, CASA has an odour management project team and their report is expected in June 2015. The TWG will examine that report and decide if changes to the PAMZ program are warranted at a later date. There are no Alberta Energy Regulator (AER) regulations for off-lease hydrocarbon odours from facilities; detection is on an olfactory, and somewhat subjective, basis.

Another issue was monitoring emissions from existing facilities for metals, polycyclic aromatic hydrocarbons (PAHs), Volatile Organic Compounds (VOCs), and others. As with odours, the PAMZ budget makes it not feasible to expand the monitoring program at present as collecting and analyzing such data would be too costly. Plants do monitor their own emissions and some work is underway on fugitive emissions using CAPP's best management practices. The de-grandfathering of plants in 2016 could mean future budget cuts for the PAMZ program, and the program is reviewed annually.

6. PAMZ AQM Program

Kevin met with Jeff Cooper the previous day to conduct the 2013 performance review. The review incorporated two documents provided by Dow that they use for their contractors' performance assessments. The review result was very positive. Kevin recommended that PAMZ enter into a one-year contract with Focus for the operations and maintenance of the PAMZ AQM Network. The TWG unanimously agreed.

Kevin reported on the air monitoring program. At the Caroline station, there have been no exceedances of any objectives or guidelines since the Sept. 25 board meeting. There were a few PM2.5 high-scaling episodes but all were associated with power interruptions. High total hydrocarbon (THC) levels were observed on the nights of Sept. 23-24. Operations were

normal at the Caroline plant and there are numerous wells and batteries in the area. No clear source for these THC levels was identified.

No exceedances have been observed at Red Deer Riverside since the last meeting, including PM2.5, which is being watched closely. A new Sharp PM2.5 analyzer provided by ESRD was installed, and its performance and data are being compared with the TEOM analyzer. A fair correlation has been noted to date, although Sharp data has more resolution and less noise. Any major differences are expected to appear in cold winter months when some volatiles and semi-volatiles may be “cooked-off” by the TEOM.

The McCoy portable station was at the Crossfield-Carstairs site from July 3 to Oct. 2, then at Eagle Hill from Oct. 2 to Nov. 4, followed by Rocky Mountain House North from Nov. 4 through to the first week in December. It is scheduled to move to Everdell in early December and remain there until the first week in January. THC levels observed at Eagle Hill were at or near background and much lower than was observed in April and May. At Rocky Mountain House North, THC and PM2.5 levels and patterns were typical of urban locations. Total Reduced Sulphur (TRS) readings were at or near the lower detectable limit. THC, NOX and PM2.5 levels tend to be highest in the early morning during rush hour before any winds come up.

The Martha station has been at the Lancaster Park site since early July and all levels have been within historical normals for the city of Red Deer. Trends are similar to Red Deer Riverside, although PM2.5 levels for October were slightly higher (6.04 vs. 5.20 at Riverside). TRS (primarily hydrogen sulphide) declined throughout September into October, supporting the theory that readings are associated with biogenic source(s) (that is, wetlands south of the city).

The results of the passive monitoring network for August and September indicate levels and spatial distribution consistent with historical normals.

7. AER FLIR Surveys

AER determines if emissions are related to venting. If a leak is found with FLIR, the facility is expected to address it. How it is documented depends on how the survey was requested. The FLIR survey at Eagle Hill was based on a PAMZ request so a formal report was prepared. No formal report was done for Everdell as the request was made internally; some leaks were identified and repaired. The facility then hired a contractor to do a thorough leak survey. There are no current regulations for off lease hydrocarbon odours. It is expected that oil and gas facilities will follow the CAPP Best Management Practices guide concerning fugitive emissions.

8. Operating Budget and Funding Apportionment

Kevin reviewed the monitoring schedule on which the 2014 budget is based.

Martha		McCoy
14-Jan	Red Deer Lancaster Reservoir	Everdell
14-Feb	Red Deer Lancaster Reservoir	Johnston's
14-Mar	Red Deer Lancaster Reservoir	Crossfield
14-Apr	Ponoka	Olds
14-May	Ponoka	Olds
14-Jun	Ponoka	Olds

14-Jul	Everdell		Red Deer Lancaster Reservoir
14-Aug	Johnston's		Red Deer Lancaster Reservoir
14-Sep	Crossfield		Red Deer Lancaster Reservoir
14-Oct	Crossfield-Carstairs		Red Deer Lancaster Reservoir
14-Nov	Crossfield-Carstairs		Red Deer Lancaster Reservoir
14-Dec	Crossfield-Carstairs		Red Deer Lancaster Reservoir
1 st Qtr 2015	Crossfield-Carstairs	2015	Red Deer Lancaster Reservoir

The three issues identified by the IRG will be addressed at the beginning of 2014 with the McCoy station, and followed up six months later with the Martha station. After the first three months, the McCoy trailer will go to the factory in Coaldale to get a new railing and ladder installed on the roof to increase safety. It will go to Olds then to Red Deer Lancaster. By then, the TWG hopes to have final approval from ESRD to amend the monitoring program to one portable and three permanent sites.

Kevin presented the 2014 draft budget, which had been circulated prior to the meeting. He briefly described each line item of expenses, comparing 2013 and 2014 and specifically noting where items had been increased or decreased. He reviewed details of the special projects and the amounts that are being requested this year. The intent is not to put any new money into the capital reserve fund in 2014. About 60% of the current reserve will be spent in 2014. Kevin then reviewed the expected revenues, noting that one of Shell's plants is closing in mid-2014 which may complicate the budget picture.

The group agreed by consensus to recommend to the board they accept the 2014 budget and apportionments at next Wednesday's Board Meeting.

Kevin and Aaron will table the 2014 Operating Budget and Funding Apportionments at the next Board Meeting.

Kevin will submit an application for funding the monitoring at the Lancaster site from July 2014 through March 2015 prior to the February 7, 2014 Application Deadline.

9. Other Business

Ozone Management and PM2.5 Reduction Plans

Because PM2.5 levels at the Riverside site exceeded the PM2.5 trigger in the 2009-2011 assessment, a reduction plan must be in place by early 2015. ERSD will lead development of the plan and Linda Jabs, a former project manager at CASA who is familiar with the issue, will be their lead. Work is already underway. PAMZ is a key stakeholder in developing the plan. A focus of the plan in its early stages will likely be to collect and assess the PAMZ data, look at monitoring stations and air quality, trends and future scenarios, and potential management actions. Stakeholders will be engaged to determine how to address the issues and reduce the levels, and will help identify management tools and actions. The first step will be to better understand what triggered the exceedances. ESRD is analyzing the 2010-11 episodes to see if they can identify a trigger. They need to determine the sources and whether this was a one-time incident or a trend.

The outcome may be that fingerprinting of substances may be needed to identify their possible sources. This would require enhanced monitoring, and assuming this is done by PAMZ, additional funding support would be needed. A stakeholder session, including PAMZ, the City of Red Deer and others, will be held soon to present preliminary information and talk about options and what needs to be done.

This plan will differ from the existing Ozone Management Plan because it will move more quickly to hard actions to bring the levels below the Canada Wide Standard (CWS). When the Canadian Ambient Air Quality Standards (CAAQS) come into effect, they will have even more stringent levels than the current CWS. Once a PM2.5 management plan is triggered and developed, it remains in effect.

10. Upcoming Events

- PAMZ Board Meeting, Red Deer, November 27
- Alberta Airsheds Council Funding Workshop, Sherwood Park, December 4

11. Next Meeting

The next meeting of the TWG will be January 17, 2014 9-12 at the Red Deer AER office. **Al Duben will arrange for teleconferencing with the Calgary Midnapore AER office.**

12. Adjournment

The meeting was adjourned at 1150 hrs.