



PARKLAND AIRSHED MANAGEMENT ZONE TECHNICAL WORKING GROUP (TWG)

MEETING MINUTES

Date: Friday, June 12, 2009
Time: 0915-1215
Location: ERCB, 2nd Floor, 4909 - 49 Street, Red Deer
Chair: Shane Lamden

Attendees: Lloyd Cumming - Public
Harold Gold - Bonavista
Curtis Horvath - NOVA
Aaron Rognvaldson - Husky
Pam Vust - Red Deer
Marcella deJong - Dow
Brian Goliss – Shell
Shane Lamden - NOVA
Breanna Sinclair - ERCB
Reg Watson - Public
Lenin Flores - Focus
Cody Haney - Keyera
Dale Nylund - Altagas
Leo Touchette - ERCB
Kevin Warren - Amarak

Bolded Items are Action Items

1. The meeting was called to order by the chair Shane Lamden at 0915.
2. Those present introduced themselves.
3. The agenda was reviewed and accepted with the incorporation of the PAMZ-Boundary Item into Action Item Review.
4. The minutes of the March 27, 2009 meeting were accepted.
5. The status of action items arising from the March 27, 2009 meeting were reviewed.

Kevin will send results of his review to Pam Vust and School Division and coordinate any media release with them. **In progress. Results will be reviewed with TWG today prior to meeting with Red Deer Public School Division.**

Kevin will make arrangements for monitoring at Tom King's residence in June provided monitoring at the Bighorn site is not extended into June. **Deferred until September as Bighorn monitoring was extended into June.**

Kevin will follow-up with Greg Rathgen (Bentley representative on PAMZ Board) notifying him about the monitoring site. **DONE**

Aaron to follow-up with Kevin concerning the future of the Swan Lake Station. **DONE**
Station was decommissioned in May and the SO₂ analyzers and Omron DAS donated to PAMZ as spares.

Kevin will report the group's decision to CRAZ and Shane will make a recommendation to the PAMZ board to accept the boundary change as currently proposed. **DONE** In between TWG and Board Meeting, CRAZ contacted Kevin and discussed further changes to their

original proposal. At the time of the PAMZ Board meeting a formal proposal had not been received from CRAZ. The board heard the TWG's recommendation concerning the original CRAZ proposal and decided that a decision would be expedited by email/fax/phone once Kevin received CRAZ's proposal. Planning for a quick decision was necessary in order for CRAZ to present final boundaries to the CASA Board on June 24 for their Endorsement as an airshed zone. Kevin received the boundary proposal May 12, it was approved by consensus on May 29, and communicated to CRAZ on June 4.

Action: Kevin will make arrangements to have PAMZ boundary map redrawn to reflect changes.

6. PAMZ AQM Program

AGAT Update

AGAT declined PAMZ's offer to settle five outstanding invoices for full \$61,000 with a mutual release. There has been no response to offer to settle for \$53,000 of \$61,000. PAMZ will send AGAT a cheque for \$53,000.

Kevin, Brian and Shane have received and reviewed Senes draft report assessing data and making recommendations on how to treat it to address concerns raised in June 2008 AENV Audit. They met Wednesday to discuss and Kevin is now preparing a letter summarizing their comments and providing feedback to Senes. When they have the final report from Senes they will report to AENV Audit team about a plan to proceed and the Senes report will be part of that proposed plan.

Auditor General

The Alberta Auditor General audited the Air Quality Index (AQI) Calculation for twelve provincial network stations including Red Deer for 2008. The AQI is based on real-time uncorrected data and the audit would help determine if there are any significant changes when AQI is recalculated using QA/QC'd data from the CASA Data Warehouse. The Auditor General originally requested raw data and zero/span files but dropped the request when PAMZ and other airsheds indicated there would be additional costs to Airsheds and it would take more than two days to provide the information.

CASA Data Warehouse

Alberta Environment has hired a US-based air quality consulting company to conduct an audit of the CASA Data Warehouse (CDW). The audit will look at two stations from each airshed and focus only on hourly average SO₂, NO_x, NO, NO₂, THC, PM₁₀ and/or PM_{2.5} concentrations for 2006-2007. The purpose of the audit is to determine if CDW agrees with monthly reports and that data meets the applicable Air monitoring Directive (AMD) requirements. The audit will be conducted this fall and be tabled to CASA Operations Steering Committee (OSC) before being publicly posted on AENV website.

Action: Kevin will ensure 2010 Budget includes funding for Internal Audit of PAMZ Quality Assurance Plan by a third party during first quarter of 2010.

6.1 Caroline

The new skid-mounted shelter is in place, the analyzers have been fully integrated and the station is fully operational. The station was out of service from April 20 to May 12, due to poor weather after station removed. Snow delayed site preparation and then there was an extended delay in getting power hooked up. The delay was called into AENV and received a Reference Number for excessive downtime. The installation costs will be in \$10-12k range and will come from capital expenditures fund. The land phone line is currently disconnected and may be awhile before it gets rehooked up (Telus); we are currently using a Raven cellular modem in the interim. Focus reports that internal data does not agree with actual observed station temperature. The reported temperature indicates a 6°C operating range. They suspect a faulty thermistor and are currently running a Campbell datalogger and thermistor independently to verify proper station temperature is within proper operating range (<3°C).

6.2 Red Deer

All observed readings since last meeting have been within historical normals. There have been some H₂S readings peaking at 5-6 ppb that have been attributed to the Three Mile bend Sewage Treatment facility. Kevin received a phone call from a hiker in vicinity of Gaetz lakes about a hydrocarbon odor. The complaint came after the event and Kevin could find no abnormal levels in station data. The AENV and ERCB received no reports of releases or complaints from anybody else.

6.3 Martha

The Martha portable station was at the Oriole Park site from Feb 12 - March 17. The site did not meet all AMD criteria and a lot of additional work was done to prevent access to roof (fencing) and relocate wind monitor to the school roof. There were no exceedences of any air quality objectives though 24-hour PM_{2.5} levels came close during first few days in March.

During morning drop-off period 19% of winds were from direction of vehicle bay, mid-day pick-up and drop-off 19%, late afternoon pick-up 24%. For all times of the day the highest levels of all pollutants with exception of O₃ were associated with winds from direction of downtown area. The highest levels of pollutants with the exception of SO₂ and PM_{2.5} were observed during morning drop-off. The highest levels of SO₂ and PM_{2.5} observed during mid-day pick-up and drop-off

The station was off-line for a major overhaul (in continuous service since 2000) at Focus's Calgary Shop from March 17-30.

The station was at the Cheddarville site for April monitoring period. All levels were within historical normals although THC readings showed an interesting pattern similar to what was recorded at the Rimbey site when the station was picking up fugitive emissions from local O&G batteries.

Action: Kevin will contact Al Duben (ERCB) and ask him to conduct mobile THC monitoring survey using FLIR camera in November or before.

The May monitoring period at the Bighorn Site was extended into June. The prescribed burn ran from Friday, May 29 – Sunday, June 7. A total of approximately 4900 hectares was burnt, including approximately 4000 hectares of Provincial Land and 880 hectares of Federal Land (Banff National Park). The province is satisfied with the area completed in Provincial Land and focus will now shift to securing and monitoring. Within the burn area, isolated trees may continue to burn throughout the summer and crews will continue to monitor. Periodically, smoke may reduce visibility. During May there was also a burn at the Ya-Ha-Tinda that got out of hand and the station may have picked up low levels of smoke from this fire.

The station will move to Harmattan site in July. Kevin is working on establishing a new site at Ken Trout's ¼ section (SE-2-32-4 W5, NNE of Harmattan & Shantz facilities) or will go to an existing Zella-Bergen Site at the McGregor Residence (NNW) if costs are prohibitive.

6.4 Raven

The raven portable was at the Medicine Lodge site for the first quarter of 2009. All levels well within all AAQO, with the exception of one exceedance of the 24 hr PM2.5 air objective. Wood burning by the resident during a cold period with little wind was the cause of the exceedance; Kevin has met with the resident and reviewed results.

The station was at the Bentley site for the second quarter located at the Town's pumping station & reservoir in Northeast. There have not been many southwest winds (direction of Kingdom Farms Hog Farm); when there are in the evening we are seeing low level TRS < 2 ppb hr average. The maximum reading to date was 5 ppb April 30, 04:00 MST with light west winds.

The station will be moving back to Crossfield-Carstairs site for the third quarter, and a new site in Beiseker for the fourth quarter.

6.5 Passives

All observed levels since last meeting were consistent with past trends and spatial patterns.

7. Tay River Network

The last results from the Tay River Network (April) were consistent with historical levels and patterns i.e. highest values in proximity of Ram River and Strachan facilities. The Swan Lake continuous monitoring station was decommissioned in May.

8. Ozone Management Plan

AENV accepted the PAMZ Plan with minor revisions to 3 actions (2 are already underway so were changed to short term, one from long term to continuous). Kevin distributed the final version to the group. A media release of AENV acceptance delayed (was going to be June 3). OMP committee is currently working on funding application for approx \$35K for resources for short term actions. The committee is meeting later this afternoon to finalize

application and to review plan with new City of Red Deer Rep, Lorna Watkinson-Zimmer.

9. CASA Ambient Monitoring Strategic Plan (AMSP)

The CASA board agreed to accept the consensus recommendations from the team at their March meeting regarding the actual plan. The team was unable to reach consensus on three things:

- Timing associated with implementation (five years may be too soon)
- Funding associated with non-point sources and how these funds would be recovered. AENV is considering if it can provide funding in the short term and come up with a mechanism for those sources in the longer term.
- The percentage of compliance monitoring that would go into the new system.

The AMSP team is in abeyance until after the June 24 CASA board meeting. At that meeting, AENV will present a short-term implementation plan (12-24 months), and preliminary thinking on options for a long term sustainable funding mechanism. The team expects to meet once more to finalize its report. If the funding issues can be resolved, it will help zones with their funding approach, especially for diffuse sources, and will also make funding consistent and fair across the province.

10. Air Dispersion Modelling Project

Alex De Visscher, a professor from University of Calgary delivered a presentation on a project aimed at modelling health outcomes based on emission sources in PAMZ region. Sheldon Roth, U of C, is also involved. The project has some similarities with an approach that was considered by the PAMZ Human Health Committee before the DTHR was re-organized. The group noted a number of issues with the proposed study:

- Reliance on epidemiological approach
- Flat vs complex terrain issues
- Reliance on NPRI for data inputs (there are more than the 13 indicated)
- Limited ability of CALPUFF for dealing with ozone chemistry (CEMAC better)
- Ability to deal with non-point and diffuse sources
- Expansion scenario (production at most large plants is declining)

Group members committed to assist Alex with further more recent information if requested

11. Other Business

East Central Airshed

Area stakeholders met May 14 at Flagstaff County Offices in Sedgewick, Their next meeting will be June 18 at Atco Power's Forestburg Plant. Kevin gave group a presentation on Big Valley & Red Willow Monitoring. Next meeting he is giving a presentation on PAMZ; group heard from LICA at last meeting. Current focus is on engaging stakeholders and getting funding for a feasibility study. Issues are large geographic area, sparse population and sparse existing ambient monitoring.

Southern Alberta Air Study

AENV has issued an RFP for a study of air quality in the southern region of Alberta to be used in developing a Land-use Plan for the southern Region under the Land-Use Management framework. The study could include sources in PAMZ near the southern region boundaries. The study is being conducted independent of the CRAZ.

Audit Committee

An AD Hoc Committee has been formed with representation from 3 Airsheds (PAMZ, FAP and ACAA), AENV Audit Team & Mgr, and Contractors (Focus & Aurora). The groups Terms of reference were finalized at last meeting.

Purpose: To develop a process for following up and closing off audits

Goal: To have an agreed-upon (agreed by this committee) audit follow-up process by end of November 2009 that can be incorporated into updated an audit protocol document.

Deliverables: Meeting minutes, a document that can be inserted into Audit Protocol regarding closing off audits, supporting recommendations.

A proposal for audit protocol revisions will be distributed by AENV to the Air Approval holders for review for informational purposes.

2010 Budget

Kevin presented a preliminary spreadsheet of potential funding allocations based on same operating costs as 2009. There are substantial implications from Husky Ram River's reduced 2008 emissions for several other plants whose fees will increase.

Action: Kevin will recalculate funding allocations for all facilities assuming no minimum/maximum \$1,000 contribution for small facilities. Spreadsheet will be for discussion purposes only.

12. Upcoming Events

- PAMZ Board Meeting & AGM Wednesday June 17 Ponoka Fish & Game Club
- CEMAC Open House, Mountain View County Office, June 17
- SPOG Neighbour's Day – September 9, Sundre Curling Club
- ZoneVolution Zones Conference – Oct 19 & 20, Mayfield Inn Edmonton, Early Bird Registration July 31

11. Next Meeting - **Friday, September 11, 2009** 0900 - 1200 hrs at the Red Deer ERCB..

12. Adjournment - meeting was adjourned at 12:15