



Minutes: **Technical Working Group Meeting**
Date: **Sep. 18, 2015**
Location: **Alberta Energy Regulator Boardroom**
 Room 213, 5002 - 55 St Red Deer

Participants:

Noor Alif, AEP	Neil Berry, AER	Rod Boshnick - ME Global
Marty Collins - AEMERA	Jeff Cooper, WSP	Jon Cuttress – WSP
Crissy Handziuk, NOVA Chemicals	Max Mazur - AEP	Dale Nylund, Altagas/Taylor
Karlee Overguard, Shell	Jim Saltvold - Public	Kevin Warren - Amarok

Guest: Long Fu, AEMERA

Bolded Items are Action Items

1. The meeting was called to order by the chair, Jim Saltvold, at 0930 hrs
2. All attendees introduced themselves.
3. The agenda was reviewed and accepted as circulated.
4. The minutes of the June 12, 2015 meeting were approved by consensus.
5. The status of action items arising from the June 12, 2015 meeting and previous meetings was reviewed.
 - Shelley of AEMERA will approach Environment Canada to find out what needs to be done to make the Lancaster station part of the NAPS network **CARRY FORWARD** Marty Collins of AEMERA will follow up and report back to the committee
 - AEMERA (Marty) will follow-up on the provision of a Sharp 5030 PM2.5 analyzer at Lancaster at earliest opportunity. **CARRY FORWARD** PAMZ's new contract with AEMERA identifies Sharp 5030 PM2.5 Monitor SN E1339 and TECO 48i CO Monitor SN1235356077 for the Lancaster Station. Marty Collins will follow up and report back to the committee
 - Kevin will follow up with AEMERA on Status of Contract **DONE** Contract was signed once CGL Insurance policy requirement was reduced to \$2,000,000 per occurrence, \$5,000,000 aggregate

6. PAMZ AQM Program

General

- PAMZ received approval to remove the two mountain parks' stations from the PAMZ Passive Monitoring Network from AEP June 22, 2015. Last samples were collected on June 29, 2015.
- As mentioned above, PAMZ signed off on the PAMZ-AEMERA Contract for the operation and maintenance of the Red Deer Riverside and Lancaster AQM Stations September 1
 - Contract April 1 - December 31, 2015
 - \$127,890 (\$42,630 per Quarter)
 - CGL Insurance Coverage maintained at \$2,000,000
 - Contract Identifies Sharp 5030 PM2.5 Monitor SN E1339 and TECO 48i CO Monitor SN1235356077 for the Lancaster Station.
- PAMZ finalized lease agreement with City of Red Deer for the lease of and provision of power for the Riverside and Lancaster Sites for next five years. City will receive an annual credit of \$10K applied against annual membership invoice (\$39K for 2015)
- Received approval from City of Red Deer's Inspections and Licensing Department for revised fencing and landscaping proposal on Wednesday. Fencing panels have been ordered, should be installed 1st or 2nd week of October.
- Numerous PM_{2.5} Daily Objective and Hourly Guideline exceedences in late June, July (primarily Red Deer Stations) and late August (primarily Caroline) – Smoke from forest fires in N. Saskatchewan (June 30 & July 4, 10-12, 22) and Washington State (August 24-29)
- No significant downtime or operational issues at any of the stations through July and August
- As the Martha Kostuch station which was originally intended for issues response monitoring is now permanently located at the Lancaster site it was agreed by the group that its name be switched with the one remaining Portable, the David McCoy station.

Action Item: Kevin will reorder decals for the Martha and McCoy stations and WSP will remove the old ones and install new ones as well as the plaques inside the trailer, weather permitting.

Caroline

- Ambient Levels largely within historical normals since June TWG meeting to present
- Significant difference between levels reported by the Sharp 5030 and the BAM 1020 since the August forest fires.

Action Item: WSP will follow up on the Sharp/Bam issue and report back to Kevin and the committee

Riverside

- Levels within historical normals since June TWG meeting to present

Lancaster

- Levels within historical normals since June TWG meeting to present
- No TRS Exceedences since June 7, frequently see higher levels (2ppb) in early morning hours following hot days – attributing to nocturnal biogenic H₂S emissions from wetlands
- Kevin compared the month PM_{2.5} averages at Lancaster with Riverside. Trends are similar with Lancaster being consistently higher since January 2015 which supports the need to get a Sharp 5030 installed at Lancaster ASAP.

McCoy Portable

- May 5 – June 3 Sundre Northeast (Johnston Residence)
- June 3 – July 7 Rimbey South (Kendrew Residence)
- July – October Rimbey Townsite. The extra month (October) was due to power issues at Kendrew Residence noted during the June Monitoring period
- November Eagle Hill South
- December Johnston Residence

Rimbey South & Townsite

- June 3 – July 7 Rimbey South (Kendrew Residence)
- Issue is fugitive emissions from oil and gas storage facilities
- Three in immediate vicinity of Kendrew Residence
- Elevated THC levels, higher frequency with northerly winds
- Relocated to Rimbey Townsite July 7
- Elevated THC levels, higher frequency with north-westerly winds but no distinct directions noted

Action item: Neil will follow-up to see if AER can do a Forward Looking Infra-Red (FLIR) survey of local sources while station is onsite through to end of October.

Passives

- Levels and distribution patterns consistent with historical normals for May through July
- Stations 1 and 2 (Bow Summit & Parker's Ridge) decommissioned June 29

7. 2016 Monitoring Site Selection

- The group reviewed the recommendations put forward by the PAMZ Issues Response Group at their August 19 meeting
 - IRG reviewed recommendations of May 13 Big Valley meeting and AER, EAP and NRCB Complaint records
 - Recommended Sites
 - Innisfail – Resident health issues
 - Big Valley – O&G emission concerns
 - Bentley – On-going odours from hog farm
- Kevin recommended doing quarterly monitoring at Innisfail Site (1st Quarter)

- Sylvan Lake and Beiseker (went with Rimbey for 2015) Beiseker shortened to two months as site not available during summer-early fall months (campground)
- TWG Recommended Portable Monitoring Schedule for 2016
 - Jan Innisfail
 - Feb Innisfail
 - Mar Innisfail
 - Apr Big Valley
 - May Bentley
 - Jun Sylvan Lake
 - July Sylvan Lake
 - Aug Sylvan Lake
 - Sep Big Valley
 - Oct Beiseker
 - Nov Beiseker
 - Dec Bentley

Action Item: Jim and Kevin will table recommended monitoring schedule at the September Board Meeting

Action Item: Kevin will distribute the historical schedule for the PAMZ portable monitoring stations to the group.

8. PM_{2.5} Management Response Update

- The GOA Submitted Air Zones CAAQS Report based on 2011-13 PM_{2.5} and O₃ Assessment on Sept. 9, 2015. This report is the first such annual assessment applying the new CAAQS standards and approach. The three new standards are:
 - 28 ug/m³– 3 year average of 98th percentile of 24 average PM_{2.5} concentrations for each of three consecutive years (CWS was 30 ug/m³)
 - 10 ug/m³ – 3 year average of annual PM_{2.5} averages NEW
 - 63 ppb – 3 year average of annual 4th highest of the daily maximum 8-hour average O₃ concentration for each of three consecutive years (CWS was 65 ppb)
- Alberta's six air zones were assessed for achievement against the CAAQS using thirty three ambient air monitoring stations distributed throughout the province.
- Riverside is in the Red Deer Zone, Caroline is in the North Saskatchewan Zone
 - Riverside exceeded both the 24-hour (30 ug/m³) and annual PM_{2.5} (11.2 ug/m³) CAAQS for 2011-13,
 - Caroline is within the Action Level for Preventing Air Quality Deterioration for PM_{2.5} 24-hour (19 ug/m³) and the Action Level for keeping Clean Areas Clean (4 ug/m³) for PM_{2.5} Annual Average at 13 and 3.7 ug/m³ respectively
- Both Riverside and Caroline are within the Action Level (56 ppb) for Preventing Air Quality Deterioration for O₃ at 52 and 54 ppb respectively
- The Red Deer Fine Particulate Matter Response is expected to be released in fall 2015 with implementation to begin immediately.
- Development of the plan is being led by Alberta Environment and Parks in

collaboration with local stakeholders. The investigative work built on the findings and lessons learned from development of the Capital Region's plan.

- The Red Deer Fine Particulate Matter Response will serve as a foundational piece of operational policy that will inform the development of the regional Red Deer Region Air Quality Management Framework when it is initiated.
- AEP will explore development of new management tools to support management responses and action plans.

9. AEMERA Presentation

- Long Fu of AEMERA gave a presentation on the capabilities of their Portable Light Detection And Ranging (LIDAR) unit and various data analysis techniques that can help provide a better understanding of the PM2.5 issue in Red Deer. The group also discussed possible enhanced sampling/monitoring programs at the Red Deer Stations. Long Fu's presentation is attached.

Action Item: Kevin and representatives of the TWG will meet with AEMERA and AEP to further discuss enhanced monitoring/sampling techniques for PM2.5 and its precursors and the path forward.

10. 2016 Preliminary Budget Discussion

- Kevin discussed the various assumptions that he will use to prepare the 2016 draft operating budget
 - Riverside and Lancaster O&M funded by AEMERA
 - Any new PM2.5 monitoring funded by GOA
 - Existing PAMZ funding formula remains in place for rest of program and other PAMZ activities
 - Carry forward any 2015 surpluses and apply to 2016 general revenues
 - Replacement of Teco 55 THC-CH4-NMHC Monitor at Lancaster in 2015 and BAM 1020 PM2.5 Monitor at Portable in 2016
 - No contributions to Capital Replacement Fund for 2016

Action Item: Kevin will prepare a draft 2016 Operating Budget with associated funding allocations and present it to the committee at their November meeting

11. OTHER

AAC-AEMERA Update

- Due to time restrictions discussion of the AAC-AEMERA Memorandum of Understanding and Workplan were deferred to the next meeting.

12. Upcoming Events

PAMZ Board Meeting - September 23 GH Dawe Centre Red Deer

Synergy Conference - November 1-3, Calgary

13. Next Meeting

The next meeting of the TWG will be November 20, 2015 at the AER Office in Red Deer.

14. Adjournment

The meeting was adjourned at 12:10 hrs.