Aberta Environment and Parks

Monitoring Branch Environmental Monitoring and Science Division University Research Park 3535 Research Road, NW Calgary, AB, T2L 2K8 http://aep.alberta.ca/

February 19, 2020

File No: 2019 - 490A/512A

Nadine Blaney Executive Director Fort Air Partnership PO Box 3051 Fort Saskatchewan, Alberta T8L 2T1

Ms. Blaney:

Subject: <u>2019 Fort Air Partnership (FAP) Ambient Air Monitoring Network Audit Phase 2</u> <u>Results</u>

Between the dates of February 3rd to 7th 2020 the Alberta Environment and Parks Ambient Air Monitoring Audit group conducted audits of selected FAP ambient air monitoring stations - several audit findings that require written response from FAP were noted. The following is a summary of the findings:

- The Non-Methane Hydrocarbon (NMHC) portion of the Methane/Non-Methane Hydrocarbon (Thermo 55C) analyzer at the Lamont County air monitoring station failed to meet audit criteria. The NMHC portion of the 55C was 12% below the high point target concentration, 11% below the mid-point concentration, and the analyzer slope as determined by linear regression was outside of audit tolerance. Through on-site investigation it was determine that the analyzer failure was due to an unknown instrument malfunction, and calibration gas that is 4% to 5% off of the stated concentration. FAP replaced the malfunctioning analyzer with a replacement shortly after the audit. FAP is required to address the data collected by the failed analyzer going back to a point in time where the analyzer was last demonstrated to meet AMD calibration acceptance criteria.
- 2. The ambient temperature sensor at the Range Road 220 station was found to be outside of audit tolerance. FAP is required to repair, replace, calibrate, or adjust the ambient temperature sensor at the Range Road 220 station.
- 3. The NH3 analyzer at the Ross Creek station met audit criteria, but was at the limit of audit tolerance on the low audit test point. The audit team recommends FAP assess NH3 analyzer response to improve operation and linearity. This is a recommendation only and no action is required by FAP.

Upon receiving notification of this performance audit FAP was asked to provide the date of the most recent quality system audit as required by AMD Chapter 5 QS 4-A and QS 4-B(b). FAP indicated that their QAP was last audited July of 2019, and the QAP of the FAP operations

contractor (WSP) was last audited May of 2019. However, the QAP of FAP's data validation contractor has not been audited in accordance with AMD Chapter 5 Section 4.0. As such FAP is required (audit finding 4) to ensure that its data validation contractor completes a Quality System audit that meets all applicable aspects of AMD Chapter 5 section 4.0. FAP must provide the audit team with a timeline for completion of this task and a copy of the audit report.

Please address all findings noted above in writing as per AMD Chapter 8 AUD 5-C by March 19th, 2020 indicating what corrective actions have been taken or are scheduled. If you have any questions or comments, please contact the undersigned via email or at 780 554-2238.

Regards,

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CC: AI Clark – AEP/EMSD Ambient Air Monitoring Systems Auditor Marty Collins – AEP/EMSD Air Monitoring Manager Bob Myrick – AEP/EMSD Director of Airshed Sciences Max Mazur – AEP Air Quality Specialist John Collins – AEP Regional Compliance Manger Mohammad Habib – AEP Regional Approvals Manager Harry Benders - FAP Robby Dhemi - WSP <u>air.reporting@gov.ab.ca</u>

Attachments:

- Analyzer audit forms
- Audit Summary