

DIVISION OF AIR QUALITY  
Ambient Monitoring Section  
217 West Jones Street / 1641 Mail Service Center  
Raleigh, NC 27699-1641

5/26/2022

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**FROM:** Travis Funderburk, Environmental Chemist, Projects and Procedures Branch *Travis Funderburk*  
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**SUBJECT:** Updates for the Met One Beta Attenuation Monitor (BAM) 1020 and 1022

**Leak Checks:**

Initially the Met One BAM operations manuals indicated the pump flow rate drop should be less than 1.0 liters per minute (lpm) for a passing leak check. The Division of Air Quality's (DAQ's) BAM standard operating procedures (SOPs) reflected the leak check requirements in the Met One operations manual. The last several revisions (including the latest revisions of the BAM 1022 BAM 1022-9805 REV F and BAM 1022-9800 REV G) indicates a pump flow rate of 1.5 lpm or less as a passing leak check. Beginning May 26, 2022, DAQ shall follow the manufacturer's changes on this matter and will use 1.5 lpm or less as the criteria for passing leak checks.

**Zero Background Tests:**

DAQ has been performing a 48-hour minimum zero background test for the BAM 1020 and 1022. Starting on May 26, 2022, DAQ will extend the zero-background test from a 48 to 72 hour minimum to: 1) better meet our measurement quality objectives for the zero test (<2.4 microgram per cubic meter [ug/m<sup>3</sup>] standard deviation), 2) gain technical troubleshooting support from the manufacturer and 3) increase the accuracy of the BKGD calculation.

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<b>This bulletin will be incorporated into the PM QAPP, Northampton QAPP, Background QAPP, Near Road QAPP and NCORE QAPP and associated BAM 1020 and 1022 SOPs by</b>	<b>9/30/2022</b>