

## DIVISION OF AIR QUALITY

Ambient Monitoring Section

May 25, 2000

### MEMORANDUM

**TO:** Air Quality Regional: Supervisors, Chemist II, Air Monitoring Technicians  
Ambient Monitoring PPB, Electronics and Calibration Branch

**FROM:** Pat Bello

**THROUGH:** George Murray

**SUBJECT:** Update of Seasonal Average Temperatures and the Annual Average Geographic Barometric Pressures used to Calculate Hi-Vol Flows

This Memorandum replaces the October 10, 1990 Memorandum by Norma Murphy.

The following is a listing of the quarterly average temperatures, annual average barometric pressures, and site elevations for the National Weather Service (NWS) weather stations located in North Carolina. These ten-year averages (1990-1999) and site elevations are to be used for Hi-Vol calculations. The site elevations are to be used to obtain the correct site pressure. If the sampling station is greater than  $\nabla$  100 feet from the nearest National Weather Station, calculate the site pressure according to Section b of 2.3.2.6.2. . The temperature and corrected pressure are then to be used to determine Hi-Vol sampler flows.

NWS and elevation	1 <sup>st</sup> Qtr temp	2 <sup>nd</sup> Qtr temp	3 <sup>rd</sup> Qtr temp	4 <sup>th</sup> Qtr temp	Annual Avg BP (mm Hg)
Asheville 2140 feet	5.78	17.09	21.80	8.82	706.08
Cape Hatteras Sea Level	9.95	19.92	25.55	14.72	763.23
Charlotte 737 feet	8.78	20.58	25.13	11.65	743.00
Greensboro 897 feet	6.71	18.92	23.83	9.95	739.73
Raleigh 416 feet	7.90	19.60	24.61	11.04	751.84
Wilmington 30 feet	10.59	21.25	25.98	13.94	762.47

If you have questions, contact [Pat.Bello@ncmail.net](mailto:Pat.Bello@ncmail.net) or 919-715-6276.

C: wpfiles/qaplans/HiVolcal/avgtemp...