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**Division of Air Quality Analysis**  
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May 25, 2005

Mr. Doug Neeley  
Air and Radiation Technology Branch  
US EPA Region IV  
61 Forsyth Street SW  
Atlanta, GA 30303

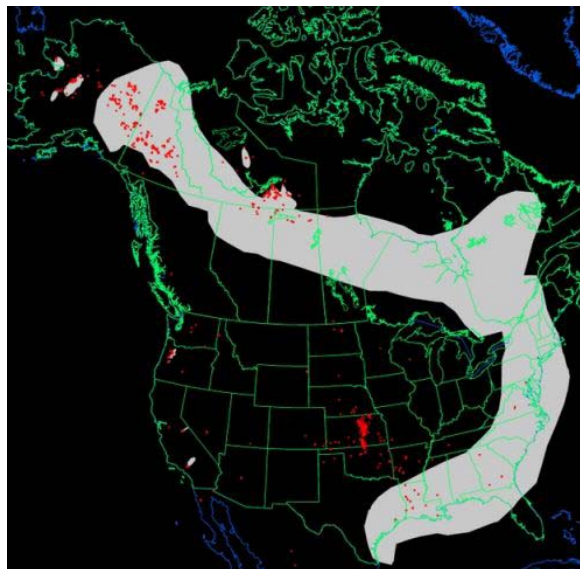
Re: CY 2004 Flagged particulate monitoring data

Dear Mr. Neeley:

During the period from July 19 to July 25, 2004 many of the ambient monitoring sites in South Carolina were impacted by smoke from wildfires across Alaska, sub arctic Canada, and the Mississippi valley. The smoke from the fires is documented as visible in all or part of South Carolina, and much of the Atlantic and Gulf coasts during this period. A period between two frontal passages defined the higher concentrations observed and the wind patterns reinforced an accumulation of smoke from other fires in Florida, Georgia and the coastal Carolinas. We have applied exceptional event flags to the to the PM<sub>2.5</sub> and PM<sub>10</sub> data in AQS that was most obviously impacted by the smoke. The affected sites and period are summarized in the attached table.

The impact of the smoke was most apparent in the widespread elevated concentrations of PM<sub>2.5</sub>. Although less obvious than the fine fraction, we feel it appropriate to flag the concurrent PM<sub>10</sub> data at the affected sites due to the significant proportion of fine mass contained in the larger fraction.

I have included with this letter a disk containing satellite imagery, back trajectories and NOAA wildfire products related to the period that ~~let us know how the event is also~~ included describing the smoke event.



Source :NOAA Hazard Mapping System Fire and Smoke Product

Separate from this event, the Cape Romain monitors (045-019-0046) were briefly impacted by local land clearing and burning of debris. The affected particulate and continuous speciation data has been flagged accordingly.

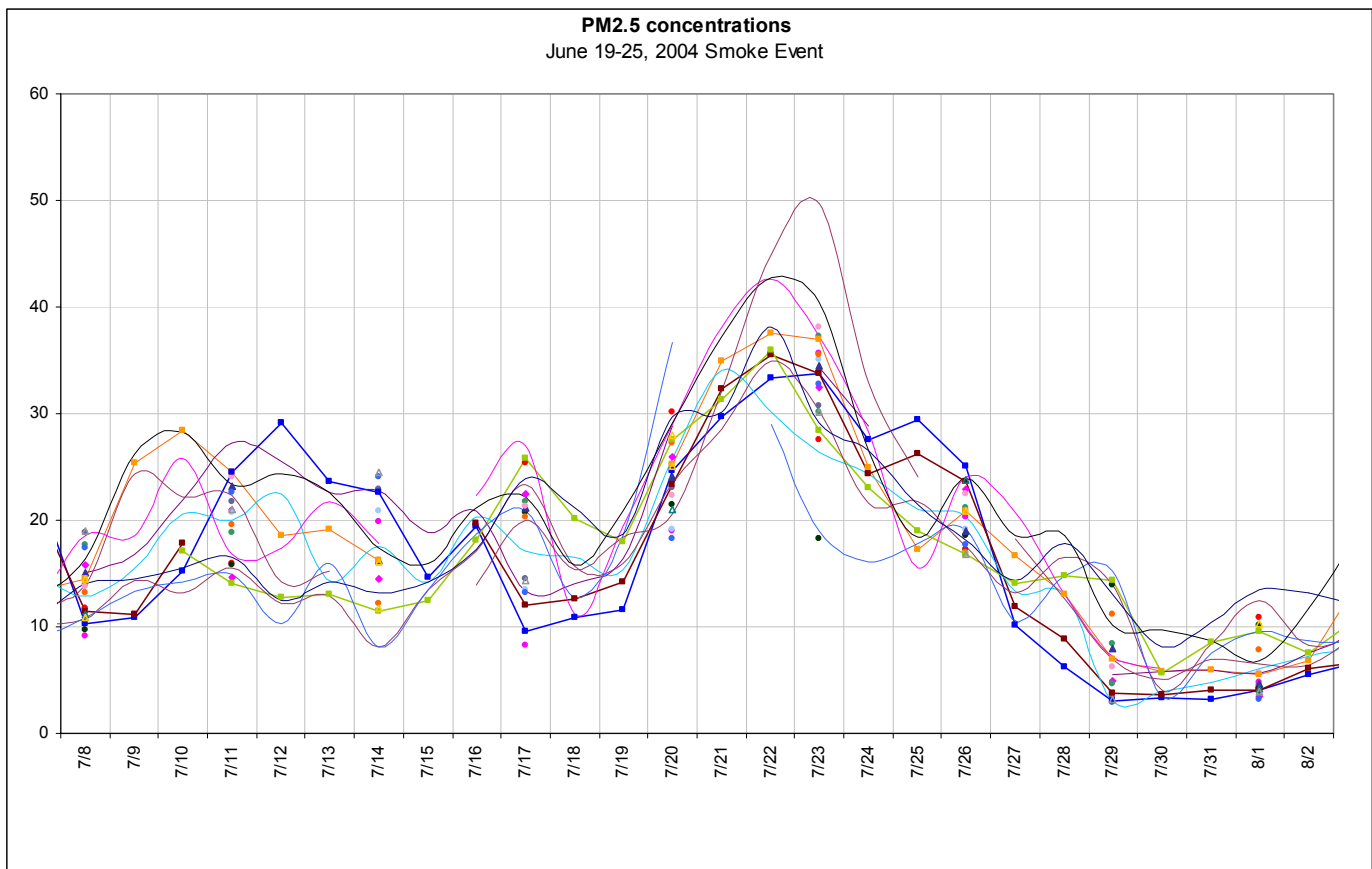
We believe the data flagging is consistent with criteria described in Guideline for the Identification and Use of Air Quality Data Affected by Exceptional Events (EPA-450/4-86-007) and request that the concurring flag be applied.

If additional supporting information is needed to support your concurrence with these data flags, please contact me at (803) 896-0902.

Sincerely yours,

Scott A. Reynolds, Director  
Division of Air Quality Analysis

cc: Allison Humphries, APTMD  
USEPA - Region 4 (include disk)  
Renee Shealy, BAQ  
SC DHEC



Monitor ID	Site Name	18-Jul-2004	19-Jul-2004	20-Jul-2004	21-Jul-2004	22-Jul-2004	23-Jul-2004	24-Jul-2004	25-Jul-2004	26-Jul-2004
45-003-0003-1	JACKSON						33.9			25.9
45-013-0007-1	BEAUFORT			19.0			35.6			20.3
45-015-0005-1	MONCKS CORNER			19.2			35.1			19.2
45-019-0048-1	FAA	12.6	14.2	23.3	32.3	35.5	33.7	24.4	26.2	23.6
45-019-0048-2	FAA Dup			21.0						23.7
45-019-0049-1	CHARLESTON PUBLIC WORKS	10.8	11.6	24.7	29.7	33.3	33.7	27.6	29.4	25.1
45-025-0001-1	CHESTERFIELD			25.9			32.4			22.9
45-037-0001-1	TRENTON			22.3			38.1			22.5
45-041-0002-1	H L SNEED						30.2			21.1
45-043-0009-1	WINYAH			18.3			32.8			17.7
45-045-0008-1	GREENVILLE HEALTH DEPT			30.2			27.5			17.2
45-045-0009-1	TAYLORS	20.1	17.9	27.5	31.3	35.9	28.4	23.1	19.0	16.8
45-045-0009-2	TAYLORS DUP			28.0						
45-047-0003-1	MERRYWOOD SCHOOL			27.3			35.5			16.9
45-051-0002-1	MYRTLE BEACH			23.0			30.7			16.8
45-051-0002-2	MYRTLE BEACH Dup						30.2			16.8
45-063-0008-1	IRMO			23.7			37.2			20.8
45-073-0001-1	LONGCREEK			21.5			18.2			18.5
45-075-0002-1	ORANGEBURG									
45-079-0007-1	PARKLANE			24.0			34.5			19.0
45-079-0019-1	BATES HOUSE (USC)			25.2	35.0	37.6	37.0	25.0	17.3	20.8
45-079-0019-2	BATES HOUSE Dup			25.1						20.8
45-083-0010-1	WEST VIEW	21.0					31.1	25.1	22.2	17.8

Monitor ID	Site Name	18-Jul-2004	19-Jul-2004	20-Jul-2004	21-Jul-2004	22-Jul-2004	23-Jul-2004	24-Jul-2004	25-Jul-2004	26-Jul-2004
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**CONTINUOUS**

45-007-0003-3	POWDERSVILLE Cont	21.2	18.7	29.7	30.2	38.2	29.1	26.5	21.4	18.1
45-019-0046--3	CAPE ROMAIN NWR Cont	14.0	16.4	28.9			34.3	28.8		
45-025-0001-3	CHESTERFIELD Cont	11.1	19.4	29.0	38.2	42.6	37.3	28.2	15.5	24.1
45-029-0002-3	ASHTON Cont	16.6	15.3	25.8	34.0	30.1	26.4	24.4	20.9	20.3
45-037-0001-3	TRENTON Cont	15.4	18.4	20.6	32.2	44.9	49.7	32.8	24.0	
45-045-0009-3	TAYLORS Cont									
45-073-0001-3	LONGCREEK Cont	12.8	18.6	36.7		29.0	19.0	16.1	17.8	19.1
45-079-0018-3	OLYMPIA Cont	15.8	20.8	29.2	37.3	42.8	40.4	26.6	18.4	24.0
45-077-0002-3	CLEMSON Cont	15.7	16.0	23.5	28.5	35.0	30.4	21.6	21.7	17.5

**SPECIATION**

45-019-0046--5	CAPE ROMAIN NWR Spec									23.9
45-019-0049-5	CHARLESTON PUBLIC WORKS Spec			25.1			36.1			25.8
45-025-0001-5	CHESTERFIELD Spec			30.6						25.3
45-045-0009-5	TAYLORS Spec			30.0						16.7
45-079-0019-5	BATES HOUSE Spec			29.8						20.6