TO: Matt Reiss

FROM: Gopal Sistla

RE: Application of MATS

DATE: February 19, 2009

As you know, the PM2.5 SIP analysis utilized EPA-MATS program that was made available to States for use in their modeling. Subsequently the EPA posted a version of MATS on their web site (http://www.epa.gov/scram001/modelingapps_mats.htm) which is available to public use. This issue of non-availability of the software was one of the questions posed by several commentators in response to the public hearing.

Another issue that has been asked by the commentators is the air quality levels in non-monitored areas of the annual $PM_{2.5}$ nonattainment area. The EPA provided us with a beta version of MATS (2.01) in June 2008 which examines this issue.

We applied this version of MATS to the results obtained as part of the SIP modeling effort, and in Table 1 is a listing of the counties, the associated grid cell and the estimated design value for annual $PM_{2.5}$.

The analysis indicates that there are no grid cells exceeding the annual $PM_{2.5}$ NAAQS of 15.0μg/m^3, which would be the response to the commentators.

I do not know what the protocol is but you may want to consider inclusion of the analysis in the SIP documentation or indicate that this information is available as an attachment.

Also, I think it is prudent to send the information to the other two states that are part of the NY CMSA. Please let me know, if you need any other information in this regard.

cc: Diana Rivenburgh

2009 Estimated annual $PM_{2.5}$ DV at unmonitored grids based upon MATS with gradient adjustment option

StateID	County ID	County Name	Model Column	ModelRow	DVF_Annual_PM25_2009 BaseB4	Percent Water in Grid Cell
9	1	Fairfield	139	105	11.7	2.6
9	1	Fairfield	140	106	11.69	0
9	1	Fairfield	142	107	11.32	18.6
9	1	Fairfield	140	105	11.31	42.4
9	1	Fairfield	142	108	11.14	0
9	1	Fairfield	140	108	11.12	0
9	1	Fairfield	140	109	11.07	0
9	1	Fairfield	140	107	10.87	0
9	1	Fairfield	139	108	10.85	0
9	1	Fairfield	141	109	10.72	0
9	1	Fairfield	139	109	10.63	1
9	1	Fairfield	141	108	10.45	0
9	1	Fairfield	141	107	10.44	0
9	1	Fairfield	141	106	10.21	32.9
9	1	Fairfield	141	105	10.11	95.2
9	1	Fairfield	142	106	9.64	87.6
9	9	New Haven	143	108	11.03	25.5
9	9	New Haven	142	110	10.95	0
9	9	New Haven	142	109	10.8	0
9	9	New Haven	144	110	10.8	0
9	9	New Haven	142	111	10.61	0
9	9	New Haven	143	110	10.44	0
9	9	New Haven	144	109	10.41	4.1
9	9	New Haven	144	108	10.2	65.3
9	9	New Haven	143	109	10.12	0.2
9	9	New Haven	145	109	9.61	8.6
9	9	New Haven	143	107	9.29	49
9	9	New Haven	145	108	8.36	94.3
34	3	Bergen	137	102	12.73	4.9
34	3	Bergen	137	103	11.24	1.2
34	3	Bergen	137	104	9.85	0
34	3	Bergen	136	104	9.57	0
34	13	Essex	136	102	11.71	2
34	13	Essex	136	101	11.35	0
34	13	Essex	135	102	10.96	1
34	13	Essex	135	101	9.58	0
34	21	Mercer	134	96	11.28	0
34	21	Mercer	134	97	10.64	0
34	21	Mercer	133	96	10.38	0
34	21	Mercer	135	96	10.13	0
34	21	Mercer	133	97	9.98	0
34	23	Middlesex	135	99	10.44	0
34	23	Middlesex	135	97	10.03	0

34	23	Middlesex	136	99	9.86	4.2
34	23	Middlesex	135	98	9.83	0.3
34	23	Middlesex	136	98	9.33	2.6
34	25	Monmouth	135	95	9.99	0
34	25	Monmouth	136	96	9.3	0
34	25	Monmouth	137	96	9.17	1.9
34	25	Monmouth	136	97	9.16	0
34	25	Monmouth	138	96	9.15	7.7
34	25	Monmouth	137	99	8.92	51.3
34	25	Monmouth	137	97	8.52	0.3
34	25	Monmouth	137	98	8.38	6.4
34	25	Monmouth	138	97	8.27	4.9
34	25	Monmouth	138	99	8.26	91.2
34	25	Monmouth	138	98	7.77	8.9
34	25	Monmouth	139	97	7.65	95.5
34	25	Monmouth	139	96	7.42	49
34	25	Monmouth	139	98	7.17	92.9
34	27	Morris	134	102	10.35	2
34	27	Morris	133	102	9.72	1.6
34	27	Morris	134	101	9.72	0
34	27	Morris	133	103	9.45	0.3
34	27	Morris	132	101	9.4	0
34	27	Morris	135	103	9.34	0
34	27	Morris	134	103	9.06	0
34	27	Morris	133	101	8.7	0
34	31	Passaic	136	103	11.21	0
34	31	Passaic	135	104	9.73	0
34	31	Passaic	134	104	9.3	0
34	35	Somerset	133	99	11.1	0
34	35	Somerset	134	99	10.83	0
34	35	Somerset	134	98	10.47	0
34	35	Somerset	134	100	9.92	0
34	35	Somerset	133	98	9.88	0
34	35	Somerset	133	100	9.38	0
34	39	Union	136	100	11.33	0.1
34	39	Union	135	100	9.8	0
36	5	Bronx	138	103	12.37	9.5
36	47	Kings	138	101	13.1	1.8
36	47	Kings	138	100	11.4	58.5
36	59	Nassau	140	102	11.02	0.8
36	59	Nassau	139	103	10.74	49
36	59	Nassau	140	103	10.6	17.8
36	59	Nassau	141	103	10.56	2.4
36	59	Nassau	140	104	9.94	49
36	59	Nassau	141	102	9.94	10.5
36	59	Nassau	140	101	8.09	35.4
36	59	Nassau	141	101	7.53	76.6
36	59	Nassau	142	101	6.68	96.6
36	71	Orange	135	108	9.96	0.2
36	71	Orange	134	107	9.67	0

36	71	Orange	135	107	9.52	0
36	71	Orange	136	107	9.5	0.5
36	71	Orange	133	107	9.43	0
36	71	Orange	134	108	9.32	0
36	71	Orange	134	105	9.26	0.7
36	71	Orange	135	109	9.23	0
36	71	Orange	134	106	9.15	0
36	71	Orange	133	106	9.13	0
36	71	Orange	135	105	9.01	0
36	71	Orange	135	106	8.92	0
36	71	Orange	133	108	8.69	0
36	71	Orange	132	106	8.64	0
36	71	Orange	132	107	7.91	0
36	81	Queens	138	102	14.72	12.9
36	81	Queens	139	102	12.21	14.3
36	81	Queens	139	101	10.01	15.6
36	81	Queens	139	100	8.12	87.3
36	85	Richmond	137	100	10.4	28.8
36	87	Rockland	137	105	9.75	16.4
36	87	Rockland	136	106	9.64	2.2
36	87	Rockland	136	105	9.09	0
36	103	Suffolk	143	105	10.42	62.3
36	103	Suffolk	143	104	10.26	2.4
36	103	Suffolk	142	103	10.15	4.3
36	103	Suffolk	144	104	10.15	0.4
36	103	Suffolk	142	104	10.13	9.6
36	103	Suffolk	142	102	9.94	51
36	103	Suffolk	141	104	9.56	42.7
36	103	Suffolk	142	105	9.43	100
36	103	Suffolk	144	105	9.35	28.3
36	103	Suffolk	145	105	8.69	14.1
36	103	Suffolk	143	103	8.68	28.8
36	103	Suffolk	145	104	8.46	14.1
36	103	Suffolk	146	105	8.19	8.2
36	103	Suffolk	144	103	8.1	66.9
36	103	Suffolk	145	106	8	76.2
36	103	Suffolk	144	106	7.98	93.3
36	103	Suffolk	146	106	7.85	49
36	103	Suffolk	143	102	7.59	88.3
36	103	Suffolk	147	106	7.59	64.7
36	103	Suffolk	148	108	7.58	85.3
36	103	Suffolk	147	107	7.43	49
36	103	Suffolk	148	107	7.28	60.9
36	103	Suffolk	146	107	7.21	96.9
36	103	Suffolk	147	108	7.14	95
36	103	Suffolk	147	105	6.97	49
36	103	Suffolk	148	106	6.83	43.4
36	103	Suffolk	146	104	6.74	74
36	103	Suffolk	150	110	6.67	97
36	103	Suffolk	149	108	6.62	91.7

36	103	Suffolk	145	103	6.53	89
36	103	Suffolk	149	107	6.52	49.2
36	103	Suffolk	144	102	6.49	99.3
36	103	Suffolk	150	108	6.13	90.5
36	103	Suffolk	149	106	5.96	87.4
36	103	Suffolk	147	104	5.86	95.2
36	103	Suffolk	148	105	5.84	88.6
36	103	Suffolk	151	108	5.83	85.4
36	103	Suffolk	150	107	5.72	93.5
36	119	Westchester	138	104	11.63	7.2
36	119	Westchester	138	106	11.42	0
36	119	Westchester	138	105	11.35	0.4
36	119	Westchester	139	106	10.97	0
36	119	Westchester	139	104	10.91	39.8
36	119	Westchester	138	107	10.88	0
36	119	Westchester	137	107	10.52	0
36	119	Westchester	139	107	10.31	0
36	119	Westchester	137	106	9.62	13.3