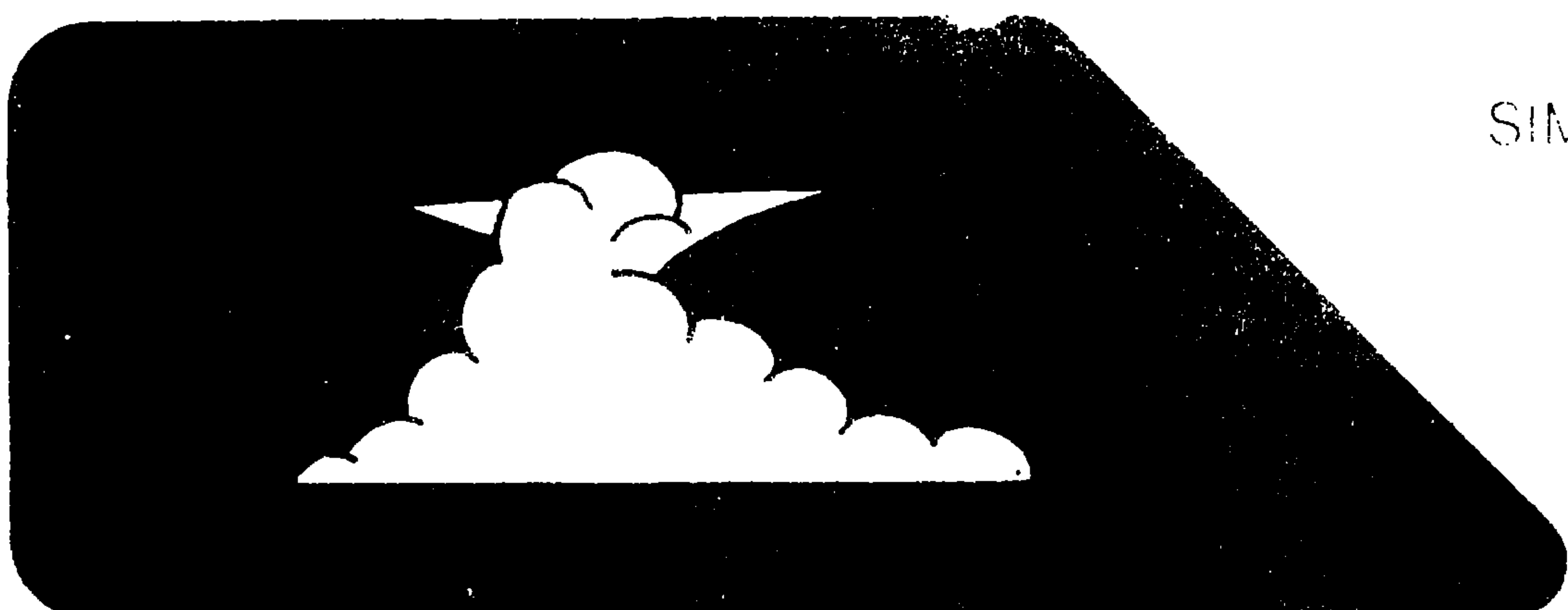




SIMPSON WEATHER ASSOCIATES, INC./SWA  
*Environmental Consultants*

400 East Jefferson St.

Cheneyville, VA 22012

Telephone: 804-979-3571/FAX: 804-979-5599

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March 12, 1992

Mr. John Stewart  
State Air Pollution Control Board  
Old Greenbriar Village, Suite A  
2010 Old Greenbriar Road  
Chesapeake, VA 23320-2168

Dear Mr. Stewart:

Please find attached the summary of PM-10 data collected at monitor 180J, Newport News, VA for 1991. All calculations were made using seasonal flow rates provided by the DAPC. Below is a table showing quarterly averages and an annual average, as well as maximum and minimum concentrations for 1991.

| Quarterly Averages<br>( $\mu\text{g}/\text{m}^3$ ) |       |       |       | Annual Average<br>( $\mu\text{g}/\text{m}^3$ ) | Annual<br>Maximum | Annual<br>Minimum |
|----------------------------------------------------|-------|-------|-------|------------------------------------------------|-------------------|-------------------|
| 1                                                  | 2     | 3     | 4     |                                                |                   |                   |
| 27.84                                              | 30.83 | 30.78 | 25.85 | 28.68                                          | 61.17             | 8.91              |

As seen from the table above, there were no violations during 1991. If you have any questions or comments please contact me at (804) 979-3571.

Sincerely,

*Ed Calvin*  
Edward M. Calvin

Attachment

*I C K*

*I*  
*A*



PM-10 measurements, Newport News, VA, Monitor 1001

Quarter 1, 1991

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REGION VI

| Date    | Filter # | Time(min) | Pre-Wt(g) | Post-Wt(g) | Diff(g) | Flow(cfm) | Conc.(ug/m3) | K-factor   |
|---------|----------|-----------|-----------|------------|---------|-----------|--------------|------------|
| 1/6/91  | 518      | 1438      | 4.616     | 4.652      | 0.036   | 41.34     | 21.35        | 109 SW-NE  |
| 1/12/91 | 519      | 1438      | 4.602     | 4.617      | 0.015   | 41.34     | 8.91         | 97 VAR     |
| 1/19/91 | 520      | 1439      | 4.52      | 4.666      | 0.046   | 41.34     | 27.32        | 378 WSW    |
| 1/24/91 | 521      | 1439      | 4.585     | 4.545      | -0.04   | 41.34     | 23.76        | 215 SW     |
| 1/30/91 | 522      | 1438      | 4.635     | 4.739      | 0.103   | 41.34     | 61.17        | 154 WSW    |
| 2/5/91  | 523      | 1438      | 4.602     | 4.65       | 0.047   | 41.34     | 27.91        | 143 SW-E-S |
| 2/11/91 | 524      | 1438      | 4.619     | 4.696      | 0.077   | 41.74     | 46.33        | 135 ENE-NW |
| 2/17/91 | 525      | 1438      | 4.586     | 4.669      | 0.083   | 41.34     | 37.42        | 411 SW-ENE |
| 2/23/91 | 526      | 1438      | 4.632     | 4.659      | 0.027   | 41.34     | 16.04        | 267 NE     |
| 3/1/91  | 527      | 1438      | 4.629     | 4.694      | 0.065   | 41.34     | 38.61        | 142 S-SE   |
| 3/7/91  | 528      | 1438      | 4.192     | 4.233      | 0.04    | 41.34     | 22.70        | 548 SW-NE  |
| 3/13/91 | 529      | 1438      | 4.155     | 4.185      | 0.031   | 43.75     | 17.40        | 93 SW-NE   |
| 3/19/91 | 530      | 1438      | 4.167     | 4.202      | 0.035   | 43.75     | 19.65        | 301 NW     |
| 3/25/91 | 531      | 1438      | 4.178     | 4.217      | 0.039   | 43.75     | 21.89        | 183 NNW-E  |
| 3/31/91 | 532      | 1438      | 4.202     | 4.237      | 0.035   | 43.75     | 19.65        | 190 NE     |

27.84 ug/m3 = average for Quarter 1, 1991

Quarter 2, 1991

|          |     |      |       |       |       |       |       |              |
|----------|-----|------|-------|-------|-------|-------|-------|--------------|
| 4/6/91   | 533 | 1438 | 4.18  | 4.238 | 0.058 | 42.61 | 31.18 | 152 SW-ESE   |
| 4/12/91  | 534 | 1438 | 4.176 | 4.206 | 0.03  | 42.61 | 16.12 | 333 NE-E     |
| 4/18/91  | 535 | 1438 | 4.162 | 4.194 | 0.032 | 42.61 | 17.20 | 232 N-NE     |
| 4/24/91  | 536 | 1438 | 4.189 | 4.232 | 0.043 | 42.61 | 23.11 | 412 SE-SW-NW |
| 4/30/91  | 537 | 1438 | 4.17  | 4.217 | 0.047 | 42.61 | 25.26 | 152 SE-SW    |
| 5/6/91   | 538 | 1438 | 4.205 | 4.271 | 0.066 | 42.61 | 35.48 | 365 SE-SW    |
| 5/12/91  | 539 | 1438 | 4.178 | 4.269 | 0.091 | 42.61 | 48.92 | 225 SW       |
| 5/18/91  | 540 | 1438 | 4.191 | 4.246 | 0.05  | 42.61 | 26.88 | 235 NW-NE    |
| 5/24/91  | 541 | 1438 | 4.169 | 4.225 | 0.056 | 42.61 | 30.10 | 199 SSW      |
| 5/30/91  | 542 | 1438 | 4.199 | 4.303 | 0.104 | 42.61 | 55.90 | 213 SSW      |
| 6/5/91   | 543 | 1438 | 4.203 | 4.238 | 0.035 | 42.61 | 18.01 | 729 NNE-ENE  |
| 6/11/91  | 544 | 1438 | 4.21  | 4.285 | 0.075 | 42.61 | 42.33 | 451 NNE      |
| 6/23/91* | 545 | 1438 | 4.246 | 4.272 | 0.026 | 42.61 | 13.98 | 172.52 NNE   |
| 6/29/91  | 546 | 1438 | 4.187 | 4.277 | 0.09  | 42.61 | 63.38 | 194 SW-W-SSW |

38.82 ug/m3 = average for Quarter 2, 1991

Quarter 3, 1991

|         |     |      |       |       |       |       |       |                 |
|---------|-----|------|-------|-------|-------|-------|-------|-----------------|
| 7/8/91  | 547 | 1438 | 4.184 | 4.222 | 0.038 | 41.83 | 28.81 | 59.72 SE-SW     |
| 7/11/91 | 548 | 1438 | 4.16  | 4.255 | 0.105 | 41.83 | 57.50 | 142 SW-NE-E     |
| 7/17/91 | 549 | 1438 | 4.174 | 4.277 | 0.103 | 41.83 | 56.48 | 159.19 S        |
| 7/23/91 | 550 | 1438 | 4.193 | 4.215 | 0.022 | 41.83 | 12.05 | 255.26 SSW      |
| 7/29/91 | 551 | 1438 | 4.203 | 4.276 | 0.073 | 41.83 | 39.97 | 149.59 E-W-NE   |
| 8/6/91  | 552 | 1438 | 4.494 | 4.554 | 0.06  | 41.83 | 32.86 | 214.59 W        |
| 8/10/91 | 553 | 1438 | 4.502 | 4.544 | 0.042 | 41.83 | 33.00 | 136.28 WSW-ENE  |
| 8/16/91 | 554 | 1438 | 4.509 | 4.545 | 0.036 | 41.83 | 19.71 | 140.57 WSW-SSW  |
| 8/22/91 | 555 | 1438 | 4.507 | 4.582 | 0.075 | 41.83 | 41.87 | 151.57 SW-NE-SE |
| 8/28/91 | 556 | 1438 | 4.476 | 4.528 | 0.052 | 41.83 | 28.48 | 100.01 S        |
| 9/3/91  | 557 | 1438 | 4.45  | 4.486 | 0.036 | 41.83 | 14.24 | 225.52 NE-SE    |
| 9/9/91  | 558 | 1438 | 4.509 | 4.574 | 0.065 | 41.83 | 35.59 | 158.38 SW-E     |



|         |     |      |       |       |       |       |       |               |
|---------|-----|------|-------|-------|-------|-------|-------|---------------|
| 9/15/91 | 560 | 1438 | 4.455 | 4.500 | 0.075 | 41.93 | 41.07 | 146.24 ENE-SE |
| 9/21/91 | 561 | 1438 | 4.497 | 4.532 | 0.035 | 41.93 | 19.17 | 220.48 N-NE   |
| 9/27/91 | 562 | 1438 | 4.507 | 4.543 | 0.036 | 41.93 | 19.71 | 258.23 NW-NE  |

38.78 ug/m3 = average for Quarter 3, 1991

#### Quarter 4, 1991

|           |     |      |       |       |       |       |       |                     |
|-----------|-----|------|-------|-------|-------|-------|-------|---------------------|
| 10/3/91   | 563 | 1438 | 4.456 | 4.492 | 0.036 | 41.88 | 16.92 | 159.13 NNE-SW       |
| 10/3/91   | 564 | 1438 | 4.458 | 4.514 | 0.056 | 41.88 | 26.32 | 129.19 SE           |
| 10/15/91* | 565 | 1438 | 4.485 | 4.517 | 0.032 | 41.22 | 15.04 | 199.27 SE-WNW-SSW   |
| 10/21/91  | 566 | 1438 | 4.449 | 4.482 | 0.033 | 41.88 | 15.51 | 131.91 N-NE-S       |
| 10/27/91  | 567 | 1438 | 4.497 | 4.559 | 0.062 | 41.22 | 29.14 | 46.52 NE            |
| 11/2/91   | 568 | 1438 | 4.472 | 4.564 | 0.096 | 41.98 | 40.42 | 212.24 SW-NW        |
| 11/3/91+  | 569 | 1438 | 4.497 | 4.559 | 0.062 | 41.88 | 29.14 | 283.82 NNW          |
| 11/14/91  | 570 | 1438 | 4.425 | 4.478 | 0.053 | 41.98 | 24.91 | 115.5 SW-E-SE       |
| 11/26/91  | 571 | 1438 | 4.417 | 4.509 | 0.092 | 41.98 | 42.24 | 304.27 SW           |
| 11/26/91  | 572 | 1438 | 4.442 | 4.478 | 0.036 | 41.88 | 16.92 | 198.93 NW-N         |
| 12/2/91   | 573 | 719  | 4.44  | 4.46  | 0.02  | 41.93 | 13.88 | 200.4 SW-NE         |
| 12/8/91   | 574 | 1438 | 4.486 | 4.472 | 0.062 | 41.98 | 31.02 | 182.75 SW-SSE       |
| 12/13/91+ | 575 | 1438 | 4.513 | 4.564 | 0.051 | 41.98 | 23.97 | 288.16 SW-NW        |
| 12/20/91  | 582 | 1438 | 4.515 | 4.578 | 0.063 | 41.28 | 29.61 | 157.07 NNW-SW       |
| 12/26/91  | 581 | 1438 | 4.51  | 4.567 | 0.057 | 41.98 | 26.79 | 38.99 N-NE, INCMPLT |

25.85 ug/m3 = average for Quarter 4, 1991

\* Denotes torn filter.

+ Denotes a break in filter sequence.

Note: filter #573 was exposed for only 719 minutes, one half the normal 1438 exposure time.

27.41 (ug/m3) = average concentration for Quarter 1  
 38.83 (ug/m3) = average concentration for Quarter 2  
 38.78 (ug/m3) = average concentration for Quarter 3  
 25.85 (ug/m3) = average concentration for Quarter 4  
 28.68 (ug/m3) = average concentration for Quarters 1, 2, 3, and 4  
 51.17 (ug/m3) = maximum concentration occurred on 1/30/91  
 2.91 (ug/m3) = minimum concentration on 1/12/91

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The following pages contain the Optical Character Recognition text of the preceding scanned images.

F. S, i NC VV,%,

J

7 1 F X@ K,

March 12, 1992

Mr. John Stewart  
State Air Pollution Control Board  
Old (Sreenbr-iar Vil lage, Suite A  
2010 Old Greenbriar Road  
Chesapeake, VA 23320-2168

Dear Mr. Stewart:

Please find attached the summary of PM-10 data collected at monitor 180J, Newport News, VA for 1991. All calculations were made using seasonal flow rates provided by the DAPC. Below is a table showing quarterly averages and an annual average, as well .as maximum and minimum concentrations for 1991.

Quarterly Averages Annual Average Annual Annual  
(Ag/m') (Ag/m') Maximum Minimum

1 2 3 4

-----  
27.84 30.83 30.78 25.85 28.68 61.17 8.91

As seen from the table above, there were no .violations during 1991. If you have any questions or comments please contact me at (804) 979-3 5-71.

Sincerely,

Edward M. Ca?V"in

Attachment

-.C- wc , C  
Ai, mcni@v !eel

1331

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