



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
& ENVIRONMENTAL CONTROL  
DIVISION OF AIR & WASTE MANAGEMENT  
715 GRANTHAM LANE  
NEW CASTLE, DELAWARE 19720

AIR QUALITY MANAGEMENT  
SECTION

TELEPHONE: (302) 323 - 4542  
FAX NO.: (302) 323 - 4598

June 9, 2006

Mr. George Losse'  
Claymont Community Coalition  
14 Franklin Avenue  
Claymont, Delaware 19703

**CERTIFIED# 7004 1160 0002 2439 2182**  
**RETURN RECEIPT REQUESTED**

**SUBJECT: Air Sampling Conducted in Aniline Village**

Dear Mr. Losse':

This letter summarizes the Department of Natural Resources & Environmental Control's (DNREC) results regarding ambient air sampling for fine particulate matter conducted by DNREC in the Claymont Community of Aniline Village earlier this year. I would like to preface the results with a brief description of particle pollution in the atmosphere.

The size of particles found in the atmosphere is directly linked to their potential for causing health problems. Small particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into your lungs, and some may even get into your bloodstream. Larger particles are of less concern, although they can irritate your eyes, nose, and throat. Small particles of concern include "fine particles", which are 2.5 micrometers in diameter or less.<sup>1</sup>

In response to continued fugitive dust complaints from residents in the Claymont Communities of Aniline Village and Knollwood, the Department of Natural Resources & Environmental Control (DNREC) was asked to sample ambient PM<sub>2.5</sub> (particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers) concentrations in Claymont.

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<sup>1</sup> United States Environmental Protection Agency (USEPA), Office of Air & Radiation, Particle Pollution and Your Health, EPA-452/F-03-001, September 2003

*Delaware's good nature depends on you!*

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RECYCLED PAPER

**Mr. George Losse'**  
**Claymont Community Coalition**

June 9, 2006

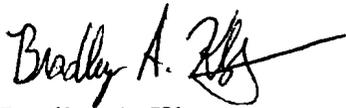
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Monitoring for ambient concentrations of PM<sub>2.5</sub> was performed in Aniline Village for one (1) month, from March 8 through April 8, 2006. The purpose of the sampling was to generate data on ambient PM<sub>2.5</sub> concentrations in Aniline Village and compare those levels to the national ambient air quality standard (24-hour standard) and to ambient concentrations measured at the nearest permanent PM<sub>2.5</sub> monitoring station in Bellefonte. The PM<sub>2.5</sub> data obtained during the sampling period consistently correlated with the PM<sub>2.5</sub> data from Bellefonte. PM<sub>2.5</sub> concentrations during this study did not exceed the national ambient air quality 24-hour standard for PM<sub>2.5</sub> (65 µg/m<sup>3</sup>).

Based upon the similarity between the data collected at Bellefonte and Aniline Village, and considering the low number of total samples, PM<sub>2.5</sub> concentrations at Aniline Village do not appear to be significantly different from those at Bellefonte. This indicates that the same mix of sources is affecting the PM<sub>2.5</sub> levels at both sites and that the Bellefonte Federal Reference Method Monitor is representative of the ambient PM<sub>2.5</sub> concentrations at Aniline Village.

Please forward this information to interested community members, and should you or anyone in the community have any questions concerning this letter, please contact Joe Martini of the Air Surveillance Branch at (302) 323-4542.

Sincerely,



Bradley A. Klotz  
Environmental Engineer  
Engineering & Compliance

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pc:     Dover File  
          Ali Mirzakhali, P.E.  
          Joe Martini  
          Paul E. Foster, P.E.  
          Everett DeWhitt, PhD.  
          Kurt Reuther  
          Jim Faedtke

Enclosures (2):   PM<sub>2.5</sub> Ambient Monitoring Results Conducted March 8 through April 8, 2006.  
                          Aniline Village 30-Day PM<sub>2.5</sub> Study Logged by Dee Whildin.

**PM 2.5 Results at Aniline Village**  
**Units:  $\mu\text{g}/\text{m}^3$**

<b>Date</b>	<b>Bellefonte Federal Reference Method</b>	<b>Bellefonte Sampler 1</b>	<b>Bellefonte Sampler 2</b>	<b>Aniline Sampler 1</b>	<b>Aniline Sampler 2</b>
9-Mar	19.6	21.0	18.0	20.9	20.8
12-Mar	26.4	26.1	27.3	26.1	26.6
15-Mar	8.1	7.9	DNR	5.7	7.5
18-Mar	5.4	5.7	DNR	Not Weighed	DNR
21-Mar	8.9	9.4	8.6	8.8	9.6
24-Mar	10.3	10.6	10.5	9.3	9.2
27-Mar	5.8	DNR	DNR	DNR	DNR
28-Mar	14.5 <sup>A</sup>	11.6	DNR	11.7	9.9
30-Mar	28.6	29.1	26.1	29.7	DNR
2-Apr	7.4	8.5	8.0	8.2	8.2
5-Apr	6.2	6.4	6.5	6.3	DNR
8-Apr	6.3	8.8	Invalid	8.7	8.7
Average	12.9	13.2	15.0	13.5	12.6

DNR = Did Not Run  
A = Bellefonte Federal Reference Method did not run; data taken from FRM monitor in Wilmington (MLK site)

6 Sherman Ave

Aniline Village, Claymont, DE

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Delaware DNREC

Aniline Village 30-day PM<sub>2.5</sub> study

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Date	Time	Temp	Wind direction	General weather notes
3/8/06	12:35 PM		220°	Partly cloudy, light wind
3-9-06	06:50 <sup>AM</sup>	46°	180°	LIGHT RAIN HEAVY CLOUD COVER.
"	12:50 <sup>PM</sup>	62°	200°	FEW CLOUDS, SUN & VERY BREEZY
"	8:30 <sup>PM</sup>	64°	176°	CLOUDY, LIGHT BREEZE
3-12-06	10:00 <sup>AM</sup>	54°	180°	LIGHT RAIN, THUNDER + LIGHT WIND
3-12-06	3:10 <sup>PM</sup>	59°	180°	V. CLOUDY, LIGHT WIND
3-12-06	9:30 <sup>AM</sup>	52°	180°	PTLY CLOUDY, LIGHT WIND
3-15-06	7:45 <sup>AM</sup>	40°	200°	PTLY CLOUDY, WINDY
3-15-06	11:35 <sup>AM</sup>	49°	190° - 280°	PTLY CLOUDY, V. WINDY
3-15-06	4:55 <sup>AM</sup>	47°	185°	CLEAR, V. WINDY
3-18-06	9:55 <sup>AM</sup>	40°	180	CLEAR, WINDY
3-18-06	2:10 <sup>PM</sup>	47°	190	CLEAR, WINDY
3-18-06	9:30 <sup>PM</sup>	36°	180	CLEAR, LIGHT WIND
3-21-06	10:15 <sup>AM</sup>	38°	220°	PTLY CLOUDY, LIGHT WIND-GUSTS
3-21-06	3:50 <sup>PM</sup>	40°	165°	CLOUDY, LIGHT WIND
3-21-06	7:15 <sup>PM</sup>	35°	174°	CLOUDY, CALM
3-24-06	7:20 <sup>AM</sup>	45°	180°	V. CLOUDY, CALM
3-24-06	2:55 <sup>PM</sup>	50°	210°	V. CLOUDY, DRIZZLE
3-24-06	9:40 <sup>PM</sup>	43°	210°	V. CLOUDY LIG
3-28-06	7:35		180°	LIGHT WIND
NEXT 3-20	- MISSED 3-27-06			

