

Lower Eastern Shore Air Monitoring Project – June 2022 Summary

June 2022 Data Summary for NH₃

MDE 1-hour screening level = 350 ppb

Parameter	Site	Average hourly value (ppb)	Median hourly value (ppb)	Maximum hourly value (ppb)	Minimum hourly value (ppb)
NH ₃	Baltimore Co. NR (Urban, no poultry operations)	6	5.8	15.5	-0.7
	Princess Anne* (Low poultry operation density)	11.9	5	336.2	1.2
	Pocomoke City (High poultry operation density)	8.2	7.1	39.9	3.3

NAAQS: National Ambient Air Quality Standards

* UMES Farm Manager shared that UAN 30% liquid fertilizer solution (urea, ammonium-N and nitrate-N) was dribbled onto the corn fields adjacent to the Princess Anne monitoring shelter on Monday, June 13th. We believe the elevated NH₃ values recorded in the days following are a result of this fertilizer application, including the maximum value of 336.2 ppb, recorded on June 15.

June 2022 Data Summary for PM_{2.5}

NAAQS PM_{2.5} 24-hour standard = 35 µg/m³

Parameter	Site	Average 24-hr value (µg/m ³)	Median 24-hr value (µg/m ³)	Maximum 24-hr value (µg/m ³)	Minimum 24-hr value (µg/m ³)
PM _{2.5}	Lake Montebello (Urban, no poultry operations)	8	8.6	12.3	3.4
	Princess Anne (Low poultry operation density)	8.3	7	16.9	4
	Pocomoke City (High poultry operation density)	6.6	5.6	15	3.2

NAAQS: National Ambient Air Quality Standards

June 2022 Data Summary for PM₁₀

NAAQS PM₁₀ 24-hour standard = 150 µg/m³

Parameter	Site	Average 24-hr value (µg/m ³)	Median 24-hr value (µg/m ³)	Maximum 24-hr value (µg/m ³)	Minimum 24-hr value (µg/m ³)
PM ₁₀	Lake Montebello* (Urban, no poultry operations)	NA	NA	NA	NA
	Princess Anne (Low poultry operation density)	16.9	16.4	27.1	11.6
	Pocomoke City (High poultry operation density)	12.5	11.6	20.9	8.2

NAAQS: National Ambient Air Quality Standards

* PM₁₀ measurements began at Lake Montebello on January 17, 2022, where measurements are taken using an FRM manual filter method. Data are included on the project-to-data summaries