

Lower Eastern Shore Air Monitoring Project – December 2024 Summary

December 2024 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)	5.5	5.4	15.6	0.6
	Princess Anne (Low poultry operation density)	2.5	2.3	8.7	0.2
	Pocomoke City (High poultry operation density)	6.5	4.6	173.1	-0.8
	Harmony (High poultry operation density)	5.8	4.4	26.1	0.4

NAAQS: National Ambient Air Quality Standards

December 2024 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)	8.3	7.1	18.3	3.3
	Princess Anne (Low poultry operation density)	5.8	5.5	12.4	2.3
	Pocomoke City (High poultry operation density)	ND	ND	ND	ND
	Harmony (High poultry operation density)	6.5	5.7	15.6	2.4

NAAQS: National Ambient Air Quality Standards

ND – Pocomoke City PM data are invalid due to flow issues currently being investigated.

December 2024 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)	9.5	9	15	4
	Pocomoke City* (High poultry operation density)	ND	ND	ND	ND
	Harmony (High poultry operation density)	10.7	10.3	18.5	4.8

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 in the project-to-date summaries. Preliminary data - subject to change. ND – Pocomoke City PM data are invalid due to flow issues currently being investigated.

Full Period of Record Data Summary for Inactive Sites

Parameter	Site	Average 1-hr value ($\mu\text{g}/\text{m}^3$)	Median 1-hr value ($\mu\text{g}/\text{m}^3$)	Maximum 1-hr value ($\mu\text{g}/\text{m}^3$)	Minimum 1-hr value ($\mu\text{g}/\text{m}^3$)	% complete
NH ₃	Horn Point* (Rural, no poultry operations)	2.1	2.1	9.4	0.1	87
	Oldtown** (Urban, no poultry operations)	6.8	7	27.1	-0.1	90
Parameter	Site	Average 24-hr value ($\mu\text{g}/\text{m}^3$)	Median 24-hr value ($\mu\text{g}/\text{m}^3$)	Maximum 24-hr value ($\mu\text{g}/\text{m}^3$)	Minimum 24-hr value ($\mu\text{g}/\text{m}^3$)	% complete
PM _{2.5}	Horn Point* (Rural, no poultry operations)	5	4.7	16.7	-1	95
	Oldtown** (Urban, no poultry operations)	7.1	6.4	28.7	0.7	93
PM ₁₀	Horn Point* (Rural, no poultry operations)	8.1	7	20	1.2	100
	Oldtown** (Urban, no poultry operations)	13	12	40	2.6	100

* As of May 14, 2021, NH₃, PM_{2.5}, and PM₁₀ measurements at Horn Point have been discontinued

** As of November 19, 2021, NH₃ and PM₁₀ measurements at Oldtown have been discontinued; During January 2022, PM_{2.5} was moved from Oldtown to Lake Montebello