

Lower Eastern Shore Air Monitoring Project – April 2020-January 2024 Summary

April 2020 – January 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)	6.3	6	24.8	-1.2
	Princess Anne (Low poultry operation density)	4.3	3.6	336.2	-1
	Pocomoke City (High poultry operation density)	10.6	7.7	544.1	-1

NAAQS: National Ambient Air Quality Standards

* NH₃ measurements began at Baltimore County Near Road on December 1, 2021

April 2020 – January 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)	7.6	6.4	114.3	-1.2
	Princess Anne (Low poultry operation density)	7.8	6.8	131.6	0.9
	Pocomoke City (High poultry operation density)	7.3	6.3	109.8	1.5

NAAQS: National Ambient Air Quality Standards

* PM_{2.5} measurements began at Lake Montebello on January 1, 2022

** Historically high PM values were observed during June 2023 Canadian wildfire smoke events

April 2020 – January 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)	13.1	12.2	101.1	2.8
	Princess Anne (Low poultry operation density)	14.2	13.3	160.2	2.1
	Pocomoke City (High poultry operation density)	13.8	12.8	131.4	2.2

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 presented here are through November 20, 2023.

Note: Preliminary data – subject to change.

** Historically high PM values were observed during 2023 Canadian wildfire smoke events

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 ($\mu\text{g}/\text{m}^3$)
NH ₃	Horn Point* (Rural, no poultry operations)	2.1	2.1	9.4	0.1
	Oldtown** (Urban, no poultry operations)	6.8	7	27.1	-0.1
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 ($\mu\text{g}/\text{m}^3$)
PM _{2.5}	Horn Point* (Rural, no poultry operations)	5	4.7	16.7	-1
	Oldtown** (Urban, no poultry operations)	7.1	6.4	28.7	0.7
PM ₁₀	Horn Point* (Rural, no poultry operations)	8.1	7	20	1.2
	Oldtown** (Urban, no poultry operations)	13	12	40	2.6

* 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