

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

April 2020 – 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) | 6.3 | 6.1 | 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 | 7.9 | 544.1 | -1 |
| | Harmony* (High poultry operation density) | 7.1 | 6.5 | 50 | 0.3 |

NAAQS: National Ambient Air Quality Standards

* NH₃ measurements began at Baltimore County Near Road on December 1, 2021; at Harmony on June 1, 2024.

April 2020 – 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) | 7.2 | 6.3 | 114.3 | -1.2 |
| | Princess Anne (Low poultry operation density) | 7.5 | 6.5 | 131.6 | 0.9 |
| | Pocomoke City (High poultry operation density) | 7.1 | 6.2 | 109.8 | 1.5 |
| | Harmony* (High poultry operation density) | 6.3 | 5.9 | 18.1 | 1.3 |

NAAQS: National Ambient Air Quality Standards

* PM_{2.5} measurements began at Lake Montebello on January 1, 2022; at Harmony on June 1, 2024.

April 2020 – 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) | 12.9 | 11.5 | 101.1 | 2.8 |
| | Princess Anne (Low poultry operation density) | 13.9 | 13.1 | 160.2 | 2.1 |
| | Pocomoke City (High poultry operation density) | 13.7 | 12.8 | 131.4 | 2.2 |
| | Harmony* (High poultry operation density) | 14.5 | 14 | 32.2 | 2.6 |

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 October 1, 2024. Harmony station began collecting data on June 1, 2024.

Note: Preliminary data – subject to change.

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