

Section 103 PM_{2.5} Air Monitoring Grant Annual Performance Report

Name of Grantee: Nashville/Davidson County, Pollution Control Division

Reporting Period: January 1, 2020 - December 31, 2020

Project Objectives and Alignment with EPA Strategic Plan:

The primary objective of this project is to collect quality assured data on ambient air concentrations of fine particulate matter and its precursors. The data will be used for: 1) comparisons of the NAAQS for PM_{2.5}, 2) development and tracking of implementation plans, 3) assessments of regional haze, and 4) assistance for health studies and other ambient aerosol research activities.

This project supports EPA's Strategic Plan Goal 1 A Cleaner, Healthier Environment (Deliver a cleaner, safer, and healthier environment for all Americans and future generations by carrying out the Agency's core mission) and Objective 1.1 (Improve Air Quality: Work with states to accurately measure air quality and ensure that more Americans are living and working in areas that meet high air quality standards), by implementing a variety of monitoring activities that will assist in achieving and maintaining health based air pollution standards to reduce the direct emission of particulate matter and other criteria air pollution from stationary and mobile sources that are protective of human health. The environmental outcome will be reduced incidences of respiratory illnesses including asthma and lung cancer and improved visibility in scenic parks and wilderness areas.

Activities/Outputs/Milestones:

See attached table titled, "Status of PM_{2.5} Monitoring Grant Commitments."

Stated monitoring outcomes were achieved. Yes No

Exceptions: Yes No

If "yes,"

Problems encountered:

One of Nashville's PM_{2.5} monitoring sites (Lockeland Elementary site) was lost in a tornado in March 2020. That site came back online partially in August 2020 and fully by September of 2020 after repairs at the school were completed. While the site was down, all data submitted to AQS was null coded with "BE" for "site/building repairs". Data from 3/3/20 was coded "AD" for "shelter storm damage" to note the tornado.

Corrective actions taken: Yes No

If "no," explain:

Name: Gillian Walshe-Langford

Position: Air Monitoring Manager

Agency: Nashville/Davidson County, Pollution Control Division

Status of PM_{2.5} Monitoring Grant Commitments

Grantee: Nashville/Davidson County, Pollution Control Division

Instructions: Please indicate whether or not the programmatic grant conditions, listed below have been met. Add any needed clarifications in the Comments column and/or make corrections to the generic comments as appropriate and explain where the referenced documents are retained.

Grant Commitments	Compliance with Grant Commitment		Comments
	Yes	No	
Operate and maintain the PM _{2.5} monitoring network in accordance with all EPA requirements	X		
Review and update the quality assurance project plan and standard operating procedures in accordance with Region 4 policies	X		
Submit PM _{2.5} data and associated quality assurance data to AQS with 90 days from the end of the calendar quarter	X		
Comply with guidance in flagging data if it is believed that the data have been affected by an exceptional event	X		
Meet 75% minimum data recovery requirements for the PM _{2.5} network monitors. Report all monitors that do not meet this requirement providing the reason that monitor did not meet the 75% data recovery and the corrective action(s) taken. The report is due to the Region 4 state/ local monitoring contact within 30 days of the data being entered into the AQS data base.		X	The 75% data requirement at the Lockeland Elementary site was not met in 2020 by any PM monitor at this location. Specifically, a BAM 1022 (POC3), collocated Thermo 2025i (POC2), and TEOM 1405 (AQI) and a TEOM 1405 (PM ₁₀). Once repairs were completed at the site, a new BAM 1022 monitor was operational at by 8/1/20 (POC3), and a new T640x monitor was operational by 9/1/20 (AQI and PM ₁₀). On 7/13/20 a 2025i PM _{2.5} (POC2) that had temporarily been collocated at our Near Road site was relocated to Lockeland Elementary.
Submit a PM _{2.5} air monitoring network plan as part of the state's annual air monitoring network plan covering all criteria pollutants. This will be done in coordination with the State, if applicable, by July 1st.	X		
Certify calendar year PM _{2.5} FRM data in the State and Local Air Monitoring Station (SLAMS) Annual Report. Submit the annual certification letter and SLAMS Annual Report by May 1st.	X		
Air Quality Index (AQI) Forecasting: As resources permit, the grantee agrees to participate in AQI forecasting for those areas with continuous PM _{2.5} monitoring and report all continuous PM _{2.5} data to AQS and to the PM _{2.5} mapping program	X		
Submit the Annual Performance Report for activities conducted for this reporting period to the EPA Technical Project Officer by March 31st.	X		

Completed by: Gillian Walshe-Langford

Position: Air Monitoring Manager

Date: 3/24/2021