

July 20, 2026

Secretary Jessica Shirley
Department of Environmental Protection
P. O. Box 2063
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Public Comment Submission

Date: July 20, 2026

To: Policy Office, Pennsylvania Department of Environmental Protection

Via: PA DEP eComment System / Email (ecomment@pa.gov)

Subject: Public Comment: 2026 Annual Ambient Air Monitoring Network Plan – Request for Ambient Monitoring of Data Center Diesel Generator Networks

Dear Secretary Shirley,

Thank you for the opportunity to comment on the Pennsylvania Department of Environmental Protection's (DEP) 2026 Annual Ambient Air Monitoring Network Plan. The Clean Air Board of Central Pennsylvania (CAB) and the Clean Air Council (CAC), citizens groups interested in improving air quality, have reviewed the network plan and submit the following comments. We are writing to formally request that the DEP expand its monitoring network to actively track and mitigate the localized public health and air quality risks posed by massive arrays of emergency backup generators at new and planned hyperscale data centers across Pennsylvania.

The Clean Air Act envisions that the United States have a comprehensive air quality monitoring program. The national ambient air quality monitoring system is designed to provide information essential for assessing Clean Air Act compliance. The U.S. Environmental Protection Agency's (EPA) policy is to assure uniform enforcement of the Clean Air Act across the country. The monitoring system plays a key role in this by providing data for comparison with the National Ambient Air Quality Standards (NAAQS) to determine whether an area is in attainment. When an area does not attain the NAAQS, the monitoring system provides key measurements to evaluate strategies for cleaning up the air and to track progress toward NAAQS attainment. Many hyperscale data centers are located in, or planning to locate in, areas which do not currently meet NAAQS for one or more pollutants.

A single modern hyperscale facility routinely installs between 50 to over 200 industrial-sized, multi-megawatt diesel and natural gas generators to guarantee uptime. For example, in April, 2026, DEP published notice that Amazon Web Services (AWS) plans to install 3 diesel generators (in addition to 72 diesel generators already approved) and 280 natural gas generators at its planned Falls Township, Bucks County facility. Also, AWS plans to install 86 diesel generators (in addition to 109 existing diesel generators) in its Salem Township, Luzerne County facility. Cumulatively, these clusters represent massive, localized point sources of severe

pollution.¹ The current 2026 air monitoring network plan fails to account for this rapid infrastructure shift, leaving a dangerous gap in public health surveillance.

There are no Commonwealth of Pennsylvania Air Monitoring System (COPAMS) stations monitoring both PM_{2.5} and NO₂ downwind of the AWS facilities in Salem Twp., Luzerne County or in Falls Twp., Bucks County. Similarly, there is no COPAMS station monitoring pollutants other than PM_{2.5} near Middlesex Twp, Cumberland County, where the newest hyperscale data center is under construction.

We urge the DEP to revise the 2026 Network Plan to address the following critical gaps before final submission to the EPA:

1. Deploy Continuous PM_{2.5} Monitoring Downwind of Data Centers

- **The Problem:** Diesel exhaust is packed with fine particulate matter (PM_{2.5}) and is a known human carcinogen. During routine testing, commissioning, or emergency grid strain (such as summer heat waves or winter freezes), these generators burn millions of gallons of diesel fuel, releasing intense plumes of toxic particulates directly into surrounding neighborhoods.
- **The Request:** The DEP should update its 2026 network plan to place continuous PM_{2.5} monitors immediately downwind of data center campuses. Relying on sparse, regional monitors miles away will entirely miss the concentrated, localized ground-level spikes of diesel particulate matter.

2. Establish Targeted Nitrogen Dioxide (NO₂) Monitoring

- **The Problem:** Industrial diesel generators are heavy emitters of Nitrogen Oxides (NO_x) which rapidly convert to Nitrogen Dioxide (NO₂) and ground-level ozone in the ambient air. When dozens of these massive engines are tested simultaneously or run during a power grid emergency, they can cause immediate, dangerous spikes in local NO₂ levels.
- **The Request:** We request that the DEP integrate specialized, continuous NO₂ monitors into the network plan for regions experiencing high densities of data center installation, ensuring that short-term National Ambient Air Quality Standards (NAAQS) are not routinely violated during generator operations, especially during declared “energy emergency operations.”

3. Monitor Air Toxics and Polycyclic Aromatic Hydrocarbons (PAHs)

- **The Problem:** Beyond particulates, diesel combustion releases dangerous Hazardous Air Pollutants (HAPs), including volatile organic compounds (VOCs) like benzene, formaldehyde, and various toxic PAHs. These chemicals accumulate in localized environments, presenting long-term health risks to communities adjacent to these facility boundaries.

¹ A recent Virginia Commonwealth University study of northern Virginia data centers concluded: “If Northern Virginia data centers were to emit their total allowed pollution, per their DEQ permits, this would significantly increase the region’s total point source air pollution, for all pollutants other than SO₂.” [Localized Air Pollution Impacts from Data Centers in Northern Vir.pdf](#) at p.5

- **The Request:** The 2026 Plan should include periodic or continuous air toxics sampling near data center clusters to capture the cumulative chemical footprint of recurring generator maintenance cycles.

4. Require Real-Time Public Reporting During Power Emergencies

- **The Problem:** Under current frameworks, the public has no way of knowing when dozens of emergency generators are actively operating simultaneously during a loss of power event, preventing high-risk individuals from taking protective health measures. [OBJ]
- **The Request:** The DEP should leverage this network update to create a public-facing notification system that links data center monitoring outputs to real-time air quality dashboards, warning residents when diesel generator emissions are spiking.

Conclusion

The 2026 Ambient Air Monitoring Network Plan must evolve to match Pennsylvania's changing industrial landscape. The rapid proliferation of hyperscale data centers—and the millions of horsepower of diesel and gas generation accompanying them—presents a new challenge to our air quality. If the DEP fails to explicitly target these facilities now, Pennsylvania risks severe public health degradation.

Thank you for your time, consideration, and dedication to safeguarding Pennsylvania's air quality.

Respectfully submitted,

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