#RFI202505-02 - NEW YORK CITY DEPARTMENT OF EDUCATION REQUEST FOR INFORMATION (RFI)

Air Quality and Temperature Monitoring Solutions for Classrooms

A. Introduction

The New York City Department of Education ("NYC DOE") serves approximately 1,800 schools and 200 central offices across New York City. In alignment with state laws and to support the health and safety of our students and staff, NYC DOE is seeking to partner with qualified vendors to provide comprehensive solutions for measuring and monitoring air quality and temperature in classrooms. We're seeking a connected system that helps schools ensure that they are in compliance with relevant regulations and remain in compliance over time, including adherence to recent state temperature guidelines outlined in the New York State Assembly Bill A9011A, and security protocols such as the Enterprise Request Management Application (ERMA) standards. Our goal is to maintain optimal indoor air quality and temperature in classrooms across the NYC public school system, ensuring a healthy, safe, and conducive learning environment for all.

B. Background

Providing comfortable and healthy learning environments is a key priority for the NYC DOE. In alignment with this goal, the "AC for All" initiative was introduced to improve classroom temperature control by installing air conditioning units. However, despite the initiative's success, 17% of classrooms remain without functional AC due to factors such as non-repairable units, classrooms without windows, or classrooms converted from other spaces. Additionally, classroom air quality monitoring is an essential aspect of ensuring optimal learning conditions.

C. Objective

The objective of this RFI is to gather information on air quality and temperature monitoring solutions that can be implemented across NYC public schools. This initiative seeks to address the following key priorities:

a. Ensure indoor air quality and temperature remain within optimal and healthy ranges.

b. Provide actionable data to facilities staff to proactively manage classroom environments.
c. Compliance with State Law - as per New York State Assembly Bill A9011A, occupiable educational and support service spaces must maintain a temperature below 88°F. Custodial engineers are equipped to monitor air quality and temperature levels, and school principals are expected to coordinate with facilities staff to relocate students to properly cooled spaces when necessary.

D. Scope of Information Requested

Vendors are invited to submit detailed information on the following aspects of their proposed solutions:

a. **Air Quality Monitoring Solutions**
    i.   **Pollutants Monitored** – Please describe the types of pollutants your system measures, including but not limited to indoor and outdoor air quality indicators such as CO_2, VOCs, PM2.5, PM10, ozone (O_3), nitrogen dioxide (NO_2), and other common airborne pollutants. Solutions that include outdoor IAC (Indoor Air Quality) monitoring units to assess external environmental conditions are preferred.
    ii. **Measurement Accuracy and Frequency** – Provide details on the accuracy specifications of each monitored pollutant and how frequently the measurements are recorded for both indoor and outdoor environments.
    iii. **Data Logging and Reporting** – Explain the system's data logging capabilities, including how data is stored, retained, and exported. Highlight any reporting features, such as automated reports, threshold alerts, or regulatory compliance summaries. Data from both indoor and outdoor units should be clearly distinguished and available for historical review.
    iv. **Integration with HVAC Systems** – Describe how your monitoring solution integrates with existing HVAC systems, including the ability to trigger ventilation adjustments based on indoor and/or outdoor air quality readings.
    v.   **Outdoor Monitoring Capability** – Include details on the specifications and weather resistance of outdoor IAC monitoring units. Clearly state how outdoor air quality data is collected, transmitted, and visualized alongside indoor data.

vi. **Maintenance and Calibration** – Outline the ongoing maintenance and calibration requirements for both indoor and outdoor monitoring devices, including intervals and whether remote diagnostics or automatic calibration features are available.

vii. **Dashboard** – Describe the centralized dashboard used for tracking building air quality data. Must support real-time monitoring, trend analysis, and alerting for both indoor and outdoor readings.

viii. **Platform** – Specify the available platforms for accessing the system (e.g., desktop software, web-based portal, mobile app, or all). Systems offering cross-platform access and user role management are preferred.

b. **Temperature Monitoring Solutions**

i. **Measurement Accuracy and Frequency** – Provide details on the accuracy of temperature readings and the frequency at which measurements are recorded. Include any specifications related to sensor range, sensitivity, and environmental tolerances.

ii. **Data Logging and Reporting** – Explain the data logging capabilities, including storage duration, export options (e.g., CSV, API), and automated reporting features. Systems should support historical data analysis and customizable alert thresholds.

iii. **Integration with HVAC Systems** – Describe how the temperature monitoring solution integrates with existing HVAC systems. Specify compatibility with the Niagara platform, which is the current graphical user interface in use. Highlight capabilities for real-time feedback, automated adjustments, and interoperability with other building systems.

iv. **Maintenance and Calibration** – Outline the maintenance and calibration requirements for temperature monitoring devices, including recommended intervals, procedures, and whether any tools or third-party services are required.

v. **Dashboard** – Detail the dashboard capabilities for real-time temperature tracking, historical trend analysis, and automated alerts. The dashboard should support both granular and portfolio-level visibility across multiple buildings, with clear indicators for thresholds and anomalies.

      vi. **Platform** – Indicate all platforms supported (e.g., desktop software, web-based interface, mobile app). Solutions offering seamless, multi-platform access with user role-based permissions are preferred.

  c. Installation and Implementation
      i. **Process and Timeline -** Provide a detailed installation process and timeline for the solution deployment across schools.
      ii. **Required Infrastructure -** Identify the infrastructure and resources required for installation. Preferred hardwire devices with BACnet MS/TP or BACnet over IP
      iii. **Training and Support -** Detail the training and support services for DOE staff during the installation and operational phases.

E. Cost Estimates
  a. **Initial Setup Costs -** Provide an estimate of the initial setup and installation costs.
  b. **Ongoing Maintenance and Operational Costs -** Outline the ongoing maintenance and operational costs.
  c. **License** - Pricing for maintaining superscription for dashboard.

F. Submission Requirements
Interested vendors should submit the following:
  a. **Company Profile -** A brief overview of the company, including relevant experience in providing similar solutions, particularly within educational or public sector environments.
  b. **Proposed Solutions -** Provide a detailed description of the air quality and temperature monitoring solutions being proposed, including technical specifications, features, and capabilities. Proposals must also address cybersecurity standards, including:
  c. **Data Security Protocols** – Describe how data is encrypted in transit and at rest. Include details on authentication methods, access controls, and data integrity safeguards.
  d. **System Architecture** – Indicate whether the system uses a cloud-based, on-premises, or hybrid model, and explain how data is protected across that architecture.

e. **Compliance** – Identify alignment with relevant cybersecurity standards (e.g., NIST, ISO 27001, SOC 2), especially for solutions involving cloud-based storage or remote access.

f. **User Access & Permissions** – Describe how user roles and permissions are managed to limit access to sensitive data and system controls.

g. **Patch Management & Vulnerability Response** – Outline how software updates, patches, and threat responses are handled. Indicate the process for resolving vulnerabilities.

h. **Audit Logging** – Explain whether the system provides detailed audit trails for user activity and system events, including access logs and data modification history.

i. **Case Studies/References -** At least two case studies or references from similar projects where your solution was successfully implemented.

j. **Cost Estimates -** A detailed cost breakdown, including initial setup and ongoing operational costs.

k. **Additional Information -** Any other relevant information that would assist the NYC DOE in evaluating the proposal.

G. Submission Instructions

a. All responses must be submitted in PDF format using the [online submission form](#).

b. Submissions must include:
   i. Cover letter
   ii. Detailed proposal
   iii. Relevant supporting documentation (e.g., case studies, compliance certifications, team bios)

c. **Submission Deadline: Monday, June 30, 2025, at 3:00 PM EST**

H. Evaluation Criteria

a. While this RFI is for informational purposes only and does not guarantee a contract award, the NYC DOE will evaluate submissions based on the following criteria -

b. Feasibility and effectiveness of the proposed solutions

c. Vendor experience and past performance

d. Cost-effectiveness

e. Alignment with NYC DOE's goals and requirements

f. Ease of integration with existing systems and infrastructure

I. **Security Adherence and ERMA Compliance**
    a. Vendors must adhere to all applicable security standards and protocols to ensure the protection of sensitive data and the privacy of students and staff. All systems and solutions must comply with the Citywide Cybersecurity Requirements for Vendors & Contractors and NYC DOE Data Privacy and Security Policies as set forth by the NYC Department of Education. Vendors should familiarize themselves with the NYC DOE Data Privacy and Data Security Compliance process and ensure that their solutions are fully compliant with these standards. For detailed information on NYC DOE Privacy and Data security polices and related resources, please visit the NYC DOE Data Privacy and Security Policies.

J. **Disclaimer**

This RFI is issued solely for informational and planning purposes and does not constitute a solicitation or commitment to purchase. Responses to this RFI will not result in any contractual obligations between the NYC DOE and any responding vendor. This RFI does not guarantee that a solicitation will follow or that a vendor will be selected for contract negotiations.

We look forward to reviewing your responses and appreciate your interest in partnering with the NYC DOE to enhance classroom environments for our students and staff.