



K-12 IAQ in Virginia: Working With Consultants to Meet the Mandate

VSPMA | Dustin Quesenberry | June 8, 2026



→ Agenda – Why IAQ Feels Big, But Can Be Managed

Today's session: HVAC, metering, and working with consultants. I'll focus on the consultant relationship.

- 1 | History of the Law**
- 2 | Know the Deliverable — The IAQ Report**
- 3 | Group the Schools & Do the Dig**
- 4 | Publish With a Plan**
- 5 | Q&A**

→ History of the Law



2020–2022 COVID and Federal Funding

- COVID-19 brought national attention to **ventilation and airborne transmission**.
- Schools received **ESSER federal funds** to improve HVAC systems, filtration, and ventilation.
- Many districts began evaluating **building ventilation performance for the first time**.

2023–2024 Advocacy for Permanent Standards

- As schools returned to normal operations, **teachers and staff raised concerns about long-term indoor air quality**.
- Education advocacy groups and teacher organizations pushed for **permanent IAQ protections in schools**.
- Early legislative proposals attempted to create **strict compliance requirements**.

2024–Present Virginia IAQ Law

- Early versions raised concerns about **cost and unfunded mandates for school divisions**.
- The legislation was revised to focus on **HVAC inspections and public reporting**. Virginia ultimately **passed HB 2618 / SB 1413**, establishing a **statewide IAQ inspection program for K-12 schools**.

→ Know the Deliverable: The Seven Requirements



IAQ Inspection Requirement	How Schools Can Prepare
1 Testing for maximum filter efficiency	Filter program with documented MERV ratings
2 Physical measurement of outside air delivery rate	Maintain drawings, TAB reports, equipment documentation
3 Verification of ventilation component condition and operation	Inspect dampers, actuators, and ventilation components
4 Measurement of outside air, return air, and supply air, as well as static pressure readings across filters, coils, and fans	Maintain drawings, TAB reports, equipment documentation
5 Verification that units operate properly and maintenance has been performed per ASHRAE standards	Maintain organized maintenance records
6 Verification of CO ₂ sensors and acceptable indoor CO ₂ concentrations	Deploy CO ₂ data loggers in occupied spaces
7 Collection of field data to support the installation of mechanical ventilation where none exists	Identify spaces without ventilation

→ Break the District Into Manageable Groups



1. Smaller Districts (Few Schools)

- A few schools is an advantage.
- Realistic to gather most data in months, not years
- Develop a rough scope and budget for the FY29 cycle
- Or run all reports together once budget is approved
- Less risk of running out of runway before July 2029

2. Larger Districts (10–15+ schools)

- Don't try to do it all at once.
- Start now — the runway is shorter than it looks
- Sort schools into groups by age, system type, or known concerns
- Plan to complete a handful of schools per year
- Refine the process between groups instead of restarting

3. Pick a Smart Group One

- Set the team up to win, not stumble.
- Choose 2–3 schools with solid documentation
- Favor newer construction or schools you know well
- Avoid your oldest or most uncertain buildings first
- Use Group 1 to define your process and templates
- If you know of significant issues in other schools, do not wait — bring those up now.

→ Do the Information Dig — Documents, Drawings, People



1. Pull the Paper Trail

- What you already own.
- TAB reports for each school
- Mechanical drawings & equipment submittals
- Sequences of operation & controls drawings
- Past commissioning or IAQ reports, if any

2. Mine the Work Order System

- Data hiding in plain sight.
- Filter-change records and MERV ratings
- Preventive maintenance history
- Recurring complaints & comfort calls
- Add photo capture to future work orders

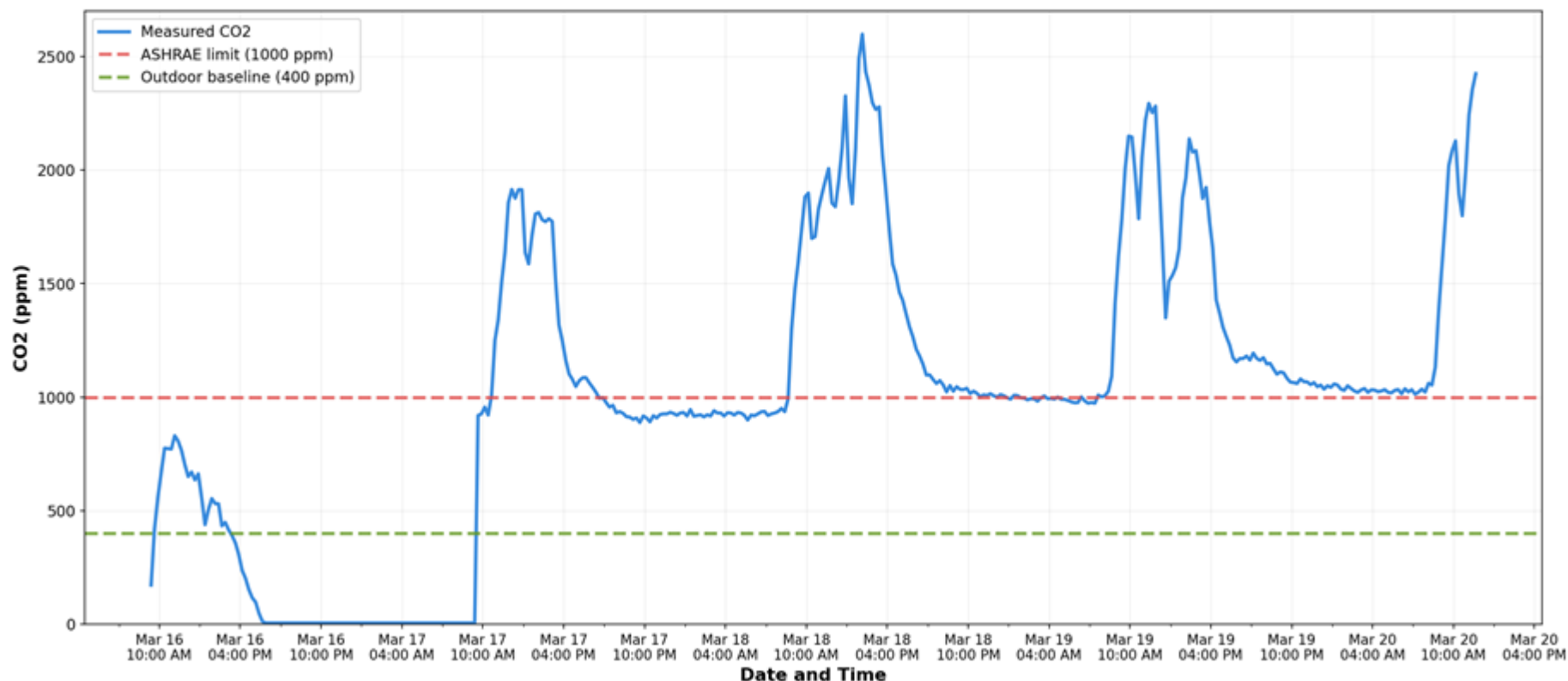
3. Walk the Building

- Boots on the ground.
- Interview maintenance technicians for known concerns
- Map units to spaces & flag spaces with no ventilation
- Deploy HOBO CO₂ loggers in occupied classrooms
- Decide where additional TAB work is justified

→ Metering Tells the Real Story — CO₂ in Classrooms



CO₂ Monitoring Assessment - Classroom 18
CO₂ Levels (March 16-20, 2026)



CO ₂ Level (ppm)	Classification	Health & Performance Effects
~400	Outdoor Baseline	Normal fresh air — no concerns
600–1,000	Acceptable Indoor Range	Adequate ventilation; no adverse effects expected
1,000	ASHRAE Limit	Indicates under-ventilation; occupants may notice stuffiness
1,000–1,500	Under-Ventilated	Headaches, fatigue, difficulty concentrating; measurable decline in decision-making (Satish et al., 2012)
1,500–2,000	Symptom Onset	Drowsiness, reduced alertness, increased respiratory symptoms, higher absenteeism rates
2,000+	Severely Under-Ventilated	Nausea, significant cognitive impairment, asthma exacerbation, increased airborne disease transmission
2,500+	Critical	Cognitive performance drops to dysfunctional levels (Harvard T.H. Chan School of Public Health, Allen et al., 2016)

→ Turn Data Into a Public-Facing Report



1. Responsibility Matrix First

- Nail down who does what.
- Define district scope vs. evaluator scope
- Identify which subcontractors fill the gaps
- Responsibility drives cost — do this before pricing
- A third-party evaluator is required by law

2. Framework, Methods, Budget

- The public is the audience.
- Agree on a sample report framework up front
- Set TAB sampling depth you can defend in public
- Tighter framework + better data = lower cost
- More contractor reliance means higher cost

3. Decide the Public Release Strategy

- You don't have to fix it first.
- Decide release cadence: rolling vs. all at once in 2029
- For known serious issues (e.g., elevated CO₂), include a plan
- Use the report to make the case for future funding
- Be transparent — the goal is trust, not perfection

Q + A

What questions can I answer about your district's path to 2029?



Thank You