SHAE SORTWELL

STATE REPRESENTATIVE • 2nd ASSEMBLY DISTRICT

Hearing Testimony
Assembly Committee on Education
October 26, 2023
Assembly Bill 434

Chairman Kitchens and members of the Assembly Committee on Education – thank you for giving me the opportunity to speak on Assembly Bill 434, which would create an indoor air quality inspection and evaluation program for public schools.

Having good indoor air quality in our schools is essential for the well-being of our students, teachers, and other staff. It is important that schools have the tools from the state to fix their shortcomings, starting with the information necessary to determine next steps, if they are needed.

Previously, legislative attempts have been made to tackle indoor air quality in schools by creating a task force in 2009, which then crafted a report of recommendations for schools. The Department of Public Instruction utilized the report to create its model management plan in 2012. However, the department does not keep track of what schools currently do or if their model management plan is adopted by any.

AB 434 would require the Department of Health Services (DHS) to establish an indoor air quality inspection program for public school buildings utilized by pupils. In the event of an inspection performed by DHS, the local health department, or a third party, the respective entity must compile a report and present it to the applicable school board and/or any person who made an air quality complaint. If requested by the school, DHS must then assist the school in developing a reasonable plan to address any air quality issues found in the inspection.

This legislation will assist districts and concerned parents in ensuring that the air students and staff breathe every school day is safe without adding unnecessary burdens on school districts.

Lastly, I would note that multiple media outlets have picked up on this bill in their coverage of the lack of spending from the Elementary and Secondary Schools Emergency Relief (ESSER) Fund. It has been reported that only 20 percent of the $1.5 billion in ESSER funds given to Wisconsin has been spent on replacing HVAC systems in schools. Several school districts, including MPS, have been criticized by the media and parents just this year for a lack of quality air conditioning during the hot summer days. Despite the funds not being used much thus far, we can point to those dollars being available to fund upgrades and inspections that the public asks

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for. This bill will give those concerned Wisconsinites a voice and a better mechanism to get improvements done.

I want to thank the committee for your time and consideration. I am happy to answer any questions members of the committee may have.

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ROBERT L. COWLES

Wisconsin State Senator, 2nd Senate District

STANDING COMMITTEES:
Natural Resources & Energy, Chair
Transportation & Local Government, Vice-Chair
Economic Development & Technical Colleges

Testimony on 2023 Assembly Bill 434

Senator Robert Cowles
Assembly Committee on Education
October 26th, 2023

Thank you, Chair Kitchens and Committee Members, for holding a hearing and allowing me to testify on 2023 Assembly Bill 434. This bill establishes an indoor air quality inspection program for schools at DHS.

According to studies by the federal Environmental Protection Agency (EPA), human exposure to air pollutants regularly registers at levels that are two to five times higher in indoor settings versus outdoor settings. In extreme cases, indoor air quality readings can even be up to 100 times higher than outdoor levels. In school settings, while we often may be concerned about outdoor air pollutants harming students during recess, sports, or time spent waiting at the bus, we too often fail to consider the detrimental effects of poor indoor air quality on students' health and learning environments, especially when the vast majority of their days are spent indoors.

The EPA's Science Advisory Board has consistently ranked indoor air pollution among the top five environmental risks to public health, causing health effects that can be as minor as some light coughing. Other effects may be greater, such as for the 1 in 13 school-aged children that have asthma which was caused or aggravated by poor school air quality. While some indoor air quality issues are largely unavoidable, such as the issues caused by the Canadian wildfire smoke earlier this year, other issues caused by the presence of moisture, allergens, dirt, radon, formaldehyde, chemicals in cleaning products or other indoor air pollutants are certainly avoidable.

Assembly Bill 434 would create an indoor air quality inspection and evaluation program for public schools at the Department of Health Services (DHS). Under the program, interested persons like parents and teachers could file a complaint with DHS if they have concerns with the indoor air quality of a school building used by pupils. Unless an inspection was done recently, DHS would be required to perform an air quality inspection of the school building and compile a report on the results which includes potential sources and health consequences. That report would be presented to the complainant, the school board during an open meeting, and the local health department.

As a few additional notes on AB 434, in addition to performing indoor air quality inspections based on a complaint, DHS may also perform random inspections of school buildings. To help alleviate the administrative burdens on the Department, they may also request and receive assistance in the indoor air quality inspections from local health departments or qualified third parties such as HVAC technicians. Further, while the bill does require DHS to respond to complaints unless an inspection was done recently, it doesn't set a timeline for the completion of an inspection, just in case DHS receives too many requests to fulfil in a timely manner. Finally, if problems are found with indoor air quality during an inspection at a Wisconsin school, the bill allows the district to request and receive assistance from DHS in preparing a reasonable plan to address those issues.

Overall, AB 434 creates a simple program at DHS that will allow parents or teachers to have their concerns addressed while also helping to provide a cleaner, safer learning environment for Wisconsin's youth.

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State of Wisconsin
Department of Health Services
Tony Evers, Governor
Kirsten L. Johnson, Secretary

TO: Members of the Assembly Committee on Education

FROM: HJ Waukau, Legislative Director

DATE: October 26, 2023

RE: AB 434 relating to: indoor air quality inspection and evaluation program for public schools.

The Department of Health Services (DHS) would like to submit written testimony for information only on Assembly Bill 434 (AB 434), regarding indoor air quality inspection and evaluation program for public schools.

AB 434 requires DHS to establish an indoor air quality inspection and evaluation program for public school buildings used by pupils. Under AB 434 DHS must respond to complaints about the air quality in a public school building used by pupils, unless the building was inspected within the previous two years and no problems were identified or the building was inspected within the previous six months and problems were identified. Under AB 434 DHS may also perform random inspections of a public school building used by pupils, and DHS may request and receive assistance from local health departments or qualified third parties in performing its duties under the bill. If DHS, a local health department, or a qualified third-party performs an inspection of the air quality in a public school building used by pupils, these entities must compile a report of the results of that inspection, including the known potential health consequences of any problems identified with air quality in the building and any identified potential sources of air quality issues, and present the report to the person who made the complaint, to the school board or the governing board of a charter school, and to the local health department (unless the local health department performed the investigation and compiled the report). If requested, DHS must then assist the school in developing a reasonable plan to address any air quality issues found in the inspection.

DHS affirms that all students and staff deserve healthy air to breathe, and this bill would provide opportunities to improve air quality in schools in Wisconsin. However, the bill does not detail how students and staff would be impacted if air quality is deemed unacceptable after an inspection, including whether a school would be required to close parts of a building, if children would be sent home, or if learning would be disrupted in other ways until the air quality has improved. AB 434 also does not detail the financial resources available to make improvements to aging school buildings, particularly in under-resourced school districts.

Indoor air quality concerns at DHS are responded to by the Indoor Air/Radon Program and Site Evaluation Program. On top of the air quality and radon evaluation responsibilities this team is also responsible for responding to other chemical hazard concerns. Without significant reprioritization DHS lacks the necessary personnel to administer the program as proposed by

AB 434. Such a reprioritization could put at risk DHS' ability to follow through on existing federal grants supporting these personnel. With over 2,000 public schools in Wisconsin, DHS is not adequately staffed to take on responsibility for random or complaints-driven indoor air quality inspections; and dedicated funding would be needed for staff, training, and implementation of this program. Additional staffing and resource needs, such as equipment and training, will depend on the program model and would likely include: DHS inspectors, local health department inspectors, or qualified third-party vendors. The range of indoor air quality concerns that fall under this bill's scope, which is unclear and not specified under AB 434, would also factor into calculations of resource needs. DHS estimates that it will need 7.0 FTEs at an annual cost of $663,896 (GPR) in order to administer the program successfully. There will also be a one-time equipment cost of $165,000 with ongoing costs of $20,000 GPR annually; and estimated annual travel costs of $111,000. AB 434 as drafted does not provide for additional resources for DHS to carry out the implementation of the proposed program.

While the goal of creating a government program to investigate air quality in schools is laudable, there are fundamental concerns with the bill as written. Without greater clarity on funding available to support staff time and training, equipment for inspections, and school building improvements, this is a largely unimplementable program that may have limited impact. It is also unclear how the parameters of AB 434 would impact each local health department. If DHS were to contract with local health departments for the inspections of schools, DHS recommends considering the quantity and cost of equipment needed for indoor air quality inspections at the local level; the staff time required to complete inspections; and the cost of education and training for local staff who would be inspecting the schools, writing reports, and providing technical support to the school on an indoor air quality management plan.

Additionally, the preemption of DHS and local health authorities to implement interventions under the proposed Wis. Stat. § 254.23(3), would result in diminished health protections. Under this provision DHS would be unable to require an area to remain unoccupied if there is use of a substance that emits volatile organic chemicals. DHS and local health officers would also not be allowed to address any communicable disease-related indoor air quality concerns that are identified by inspectors or submitted to DHS or the local health department by a complainant. This provision is in conflict with the statutory authority of local health officers under Wis. Stat. § 252.03(1) who are required to "immediately investigate" and " take all measures necessary to prevent, suppress and control communicable diseases" in their jurisdictions. As written, AB 434 would effectively remove a local health officer's authority to investigate and address communicable disease-related indoor air concerns in schools.

DHS thanks the Committee for the opportunity to provide written testimony for information only on AB 434 and we offer ourselves as a resource for Committee members for any follow up or additional information that may be needed.

SMACNA
SMACCA Milwaukee
Established 1936
Sheet Metal and Air Conditioning Contractors' Association of Milwaukee, Inc.

MEMO **October 26, 2023**

Re: 2023 Assembly Bill 434 – Relating to: indoor air quality inspection and evaluation program for public schools

Good afternoon, my name is Jonathan Kowalski. I am the Executive Director of the Sheetmetal and Air Conditioning Contractors' Association of Milwaukee ("SMACCA") and I also represent the East Central (Sheboygan) Wisconsin, Southeast (Racine/Kenosha) Wisconsin and State of Wisconsin Sheet Metal and Air Conditioning Contractors' Associations.

The contractors whom I represent are in support of **2023 Assembly Bill 434 – Relating to: indoor air quality inspection and evaluation program for public schools.**

For years, prior to the COVID-19 pandemic, the National Energy Management Institute ("NEMI") has been focused on the evaluation of air quality in schools and how poorly ventilated classrooms, with high levels of CO2 buildup can negatively impact students and teachers.

By empowering the Department of Health Sciences to establish an inspection and evaluation program for Wisconsin public school buildings through this proposed legislation crucial first steps can be taken to provide healthy learning environments.

As funds were made available to school districts on the heels of the COVID-19 pandemic our Associations were hopeful that school boards and administrators would conduct air quality studies of their current systems prior to making any changes to current Heating, Ventilation and Air-Conditioning ("HVAC") configurations and equipment. If there are federal or other dollars currently available to conduct these studies, we would encourage the funds be used as such.

The HVAC system of a building – where ventilation is controlled, airflow is monitored for efficiency, airborne pathogens are filtered and removed – is a controllable variable that will greatly impact a students' health and learning capability.

Through a verified inspection of a school's system, that school board/district can then determine what next steps to take – if they need to be taken at all. Through the partnership with qualified HVAC contractors the steps can be taken to create a safer, and more effective learning environment where students and teachers can be healthier, more alert and more successful.

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SMACCA and its affiliate Associations support the proposal to require the Department of Health Sciences to establish and indoor air quality inspection and evaluation program for public school buildings used by pupils as the best, first step in addressing the widespread issue of poor and, at times, dangerous air quality levels in these buildings.

Thank you for considering this statement of support in favor of AB-434. SMACCA and our affiliate associations look forward to a continued partnership between the Associations, the Department and our school systems as we work together to keep our students, teachers and administrators safe and productive.

Sincerely,

Jonathan Kowalski
Executive Director
Sheet Metal and Air Conditioning Contractors' Association

III. Section 3 – Ventilation Rate

A. Ventilation Rate Sample Form

Ventilation Verification and Energy Optimization Assessment

Ventilation Rate Form

Project Name:	Unit Name:
Project Address:	Unit Location:
City / Zip Code:	Area Served:

☐ **Determine Minimum Required Outside Air (OSA)**

• If available, obtain the design documents and obtain the minimum required OSA.	CFM
• Determine if the zones actual use and occupancy matches the designs expected use and occupancy.	Y/N

Original Occupancy (Design)	Occupancy Category (Use):	Occupancy:
How was original occupancy determined?		
Actual Occupancy	Occupancy Category (Use):	Occupancy:
How was actual occupancy determined?		

- If yes, proceed to outside air measurements.

☐ If No, calculate the new minimum outside air rate based on the current version of the applicable ASHRAE 62 standard for Acceptable Indoor Air Quality or current locally adopted Mechanical Code, whichever is more stringent. ▪ ASHRAE Standard 62.1 Ventilation for Acceptable Indoor Air Quality ▪ ASHRAE Standard 62.2 Ventilation and Acceptable Indoor Air Quality in Residential Buildings. • See Example at end of document.	CFM

Ventilation Verification and Energy Optimization Assessment

Ventilation Rate Form (Continued)

Project Name:	Unit Name:
Project Address:	Unit Location:
City / Zip Code:	Area Served:

☐ **Verify Minimum Required Outside Air (OSA)**

Steps			CAV	VAV
1	Disable demand control ventilation (if applicable)	☐ Check if NA	☐	☐
2	Verify unit is not in economizer mode during test (economizer disabled)		☐	☐
3	CAV and VAV testing at full supply airflow			
a.	Adjust supply air to achieve design airflow or maximum airflow at full cooling.			☐
b.	Measured outdoor airflow reading (cfm)		cfm	cfm
c.	Required outdoor airflow (cfm)		cfm	cfm
d.	Time for outside air damper to stabilize after full supply airflow is achieved (minutes):			min
4	VAV testing at reduced supply airflow			
a.	Adjust supply airflow to either the sum of the minimum zone airflows, full heating, or 30% of the total design airflow			☐
b.	Measured outdoor airflow reading (cfm).			cfm
c.	Required outdoor airflow (cfm)			cfm
d.	Time for outside air damper to stabilize after reduced supply airflow is achieved (minutes):			min
5	Return to initial conditions		☐	☐
6	Calculations			
Determine Percent Outside Air at full supply airflow ($\%OA_{FA}$) for Step 3.				
a.	$\%OA_{FA}$ = Measured outdoor airflow reading /Required outdoor airflow. 100 x (Step3b/Step3c)		%	%
b.	$\%OA_{FA}$ is within 10% of design Outside Air. ($90\% \leq \%OA_{FA} \leq 110\%$)		P / F	P / F
c.	Outside air damper position stabilizes within 5 minutes. (Step 3d < 5 minutes)			P / F

Ventilation Verification and Energy Optimization Assessment

Ventilation Rate Form (Continued)

Project Name:	Unit Name:
Project Address:	Unit Location:
City / Zip Code:	Area Served:

VAV only: Determine Percent Outside Air at reduced supply airflow ($\%OA_{RA}$) for Step 4.

a.	$\%OA_{RA}$ = Measured outdoor airflow reading /Required outdoor airflow reading. 100 x (Step4b/Step4c)		%
b.	$\%OA_{RA}$ is within 10% of design Outside Air. ($90\% \leq OA_{RA} \leq 110\%$)		P / F
c.	Outside air damper position stabilizes within 5 minutes. (Step 4d < 5 minutes)		P / F

☐ **Increased Outside Air**

- Document if the ventilation components can provide increased outside air if recommended.
- Provide documentation, including relevant photographic documentation, in the assessment report so a design professional can determine if the minimum outside air should be increased and can be without compromising the system's ability to maintain space conditions and pressurization.

Sample calculation of a new minimum outside air rate based on ASHRAE 62.1, or as required by your local jurisdiction.

- Sample requirement for a 900 square foot meeting room or assembly area.

Standard	Method	15 People	25 People	35 People
ASHRAE 62.1 2022	$10\ CFM/person + 0.12\ CFM/ft^2$	258 CFM	358 CFM	458 CFM

This document is intended to be used solely as an aide when developing the methods, procedures, and forms used in the Ventilation Verification and Energy Optimization Assessment. It is the responsibility of each contractor, supervisor, and technician to ensure that the methods, procedures, and forms used meet the requirements of the local mechanical codes. The National Energy Management Institute Committee makes no representations, whatsoever, that drafting procedures or forms based on this document will meet that requirement of local mechanical codes and expressly disclaims any liability or responsibility regarding the use of this document.