

Public Health Committee JOINT FAVORABLE REPORT

Bill No.: SB-288

Title: AN ACT CONCERNING INDOOR AIR QUALITY IN SCHOOLS.

Vote Date: 3/26/2021

Vote Action: Joint Favorable

PH Date: 2/8/2021

File No.: 483

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SPONSORS OF BILL:

Public Health Committee

REASONS FOR BILL:

This Indoor Air Quality bill provides standards for improving and maintaining safe heating, ventilation, and air conditioning systems to prevent the transmission of viruses, mold, and other toxins. Our experience with air quality in schools has been exacerbated by the COVID-19 pandemic, creating a sense of urgency to address this critical issue.

RESPONSE FROM ADMINISTRATION/AGENCY:

Deidre S. Gifford, MD, MPH, Acting Commissioner, Connecticut Department of Public Health.

The language in the bill focuses on schools maintaining heating, ventilation, and air conditioning (HVAC) systems and conducting IAQ monitoring as key mechanisms to ensure good indoor air quality. These are some problems identified with this approach:

- not all schools have HVAC systems. Some rely completely on natural (non-mechanical) ventilation and some use HVAC systems for only a portion of the building
- the IAQ monitoring program described in the bill is defined as testing that will ensure HVAC systems operate according to current building engineering standards.

Legislation which seeks to improve indoor air quality in schools by focusing on HVAC system operation will not encompass all school buildings. Additionally, this bill duplicates activities and procedures that currently exist and are already required under State Department of Education (SDE) statutes. Expertise in school building engineering is needed to establish the

IAQ monitoring, reporting and contractor certification programs described in the bill. This is expertise that DPH does not currently possess. In addition, establishing new school IAQ programs (including monitoring, reporting, review, and contractor certification requirements) would create significant cost that is not in the Department's budget.

Finally, the Department would like to comment on the use of the term "Standard 62." The correct citation of this standard is the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) Standard 62.1

NATURE AND SOURCES OF SUPPORT:

Donald E. Williams, Jr., Executive Director Connecticut Education Association (CEA):

Air quality is important to the health of students, teachers, and staff. This issue has never been more apparent than today, especially to help with the prevention and the spread of disease such as COVID-19, childhood asthma, and respiratory problems.

CEA would like to recommend that language be included to set clear standards for temperature and humidity and to make July, 1, 2024 as the effective date for temperatures to be maintained between 65 and 78 degrees in schools. These standards are similar to those of the Department of Agriculture regulations for pet shops.

This legislation would allow towns to bring HVAC systems into the twenty-first century by accessing school bonding construction funds. Connecticut needs schools that are safe and accessible to students and the community throughout the year.

Kristen Brainerd Abrahamson, Executive Vice President of MCAC

SB 288 would help maintain healthy indoor air quality in public schools and improve the learning environment for schoolchildren and work environment for teachers and administrators.

HVAC systems in schools should be maintained and operated in accordance with the prevailing maintenance and standards when the HVAC system was installed or renovated. Protection of Connecticut school children, teachers and of adults who use or work in schools from indoor air pollution is critical to their health and safety.

Trade union mechanical contractors are qualified, properly trained and ready and able to perform this important work to return our schools to operating at full capacity to enhance the learning environment for all school children, teachers and administrators.

Connecticut Green Building Council

It is important to identify a minimum indoor air quality (IAQ) standard for our State's schools. Appropriate ventilation system is a key determinant of health in buildings. Children have developing lungs with narrow airways, and compared with adults, they breathe larger volumes of air relative to their body size.

In addition to physiological health related benefits, good indoor air quality has also been shown to have cognitive benefits. Increased levels of outdoor air have been shown to improve cognitive function, and increased filtration rates have been shown to increase test

scores. Additionally, we recommend that the bill be modified to plan for viral response in new and existing schools.

**Carl Chisem, President Municipal Employees Union Independent, SEIU Local 506
Connecticut Employees Union Independent, SEIU Local 511**

Doctors have determined that continued exposure and failure to respond to indoor air quality problems can increase long and short-term health effects for students and staff. These can include Chronic Inflammatory Response Syndrome, asthma, permanent lung damage, headaches, fatigue, shortness of breath, sinus congestion, coughing, sneezing, dizziness, nausea, irritation of the eyes, nose, throat, and skin as well as depression and anxiety.

It is time that we address the deficiencies in our air quality standards and fund the much-needed improvements to safeguard the health of students and staff.

Additional Sources of Support:

Stephen Anderson, President, CSEA SEIU Local 2001

Ruth Canovi, MPH Director, Advocacy, American Lung Association in Connecticut

Karen Carlone, Old Saybrook High School

Mary Yordon, AFTCT Divisional Vice President and President Norwalk Federation of Teachers

NATURE AND SOURCES OF OPPOSITION:

Connecticut Association of Boards of Education, Inc.:

CABE is concerned that some of the provisions in SB 288 may unnecessarily restrict the use of school facilities. The proposal to require that school gymnasiums be closed “for the day” (line 45) when the temperature cannot be maintained between 65-85 degrees Fahrenheit for 2 or more hours would prohibit use even if the temperature range was restored. The bill would prohibit schools from using a gym for recess when the weather is unfavorable, eliminating the opportunity for necessary physical activity.

Section 4 of the bill requires that boards of education investigate indoor air quality complaints, which is a duty that is appropriately delegated to professional staff. Concerns for maintaining and upgrading existing HVAC systems due to COVID-19 must be recognized and additional state resources will be needed to make these changes.

Connecticut Association of School Business Officials (CASBO):

The health and safety of all students and staff attending schools in Connecticut has been and continues to be, a top priority for CASBO and its members. This includes, but not limited to, close monitoring and response to issues about indoor air quality (IAQ).

CASBO believe that this bill, although well intended, is based on individual or isolated instances, and represents a “one size fits all” approach to addressing this issue. SB 288, with its highly prescriptive school closure elements, imposes strict state guidelines that are best handled at the local level. In addition, this bill would establish broad reporting requirements that would do more to invoke fear than addressing and solving problems at individual schools.

Daniel A. Cowan P.E., LEED AP, CEM, Woodbridge, CT

The strategies outlined in SB 288 are overreaching, unrealistic, and represent a desire to close the educational buildings in the state to in-person learning without good cause. There is no body of evidence to support that not meeting ASHRAE Standard 62.1 makes a building instantly unsafe; in fact, there is a body of evidence that demonstrates that natural ventilation can work, and does work in many environments, and is allowed by Connecticut building code.

If the goal in our schools is better IAQ (Indoor Air Quality), let's target that and fund that. Let us not just throw out ASHRAE 62.1 and hope it makes the problem better. If you are not qualified to design it and or install it, then you should not be making the recommendations to change the system-level operation that you are not qualified to build. Belonging to one union or another or no union at all has zero relevance to the qualification of the people completing the work.

In general, ASHRAE 62.1 is a standard of design that continuously provides far more ventilation air than is required for the occupants of the buildings. It was developed by engineers to be used at the time of construction, with the full knowledge that buildings do slide from the goal over time and will need the effort to return to the target airflow rates.

SB 288 should state explicitly that the State of Connecticut will fully fund all repairs and testing required by this bill. Without that commitment, this is a bill that will destroy the educational process in many Connecticut schools without cause and with a faulty understanding of the purpose of the ventilation of buildings for a healthy educational environment.

Reported by: David Rackliffe, Assistant Clerk

Date: April 13, 2021