

A-Engrossed
House Bill 3031

Ordered by the House May 19
Including House Amendments dated May 19

Sponsored by Representative NERON, Senator DEMBROW; Representatives ANDERSEN, FAHEY, GRAYBER, HUDSON, NOSSE, SOSA, Senators MEEK, PATTERSON, SOLLMAN (Pre-session filed.)

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure.

[Requires Department of Education to study matters related to ventilation and energy efficiency in schools. Requires department to submit findings to interim committees of Legislative Assembly related to education not later than September 15, 2024.]

Requires school districts undertaking HVAC infrastructure improvements for which state and federal funds are made specifically available to expend such funds on certain activities aimed at improving indoor air ventilation quality in schools.

Requires that school district require contractor performing work on school HVAC infrastructure improvements to meet certain standards.

Requires school district that completes ventilation adjustments, improvements or repairs recommended by mechanical engineer to submit HVAC verification report to Department of Education. Requires department to retain copy of report for five years. Provides that verification report is subject to public inspection under public records laws.

A BILL FOR AN ACT

Relating to ventilation quality in schools.

Be It Enacted by the People of the State of Oregon:

SECTION 1. As used in sections 1 to 7 of this 2023 Act:

(1) **"ASHRAE"** means the American Society of Heating, Refrigerating and Air-Conditioning Engineers.

(2) **"Certified TAB technician"** means an individual certified by the Associated Air Balance Council, the National Environmental Balancing Bureau or the Testing, Adjusting and Balancing Bureau to test, adjust and balance an HVAC system.

(3) **"HVAC"** means heating, ventilation and air conditioning.

(4)(a) **"Mechanical engineer"** means an independent, registered professional engineer, as defined in ORS 672.002, with professional experience with HVAC systems.

(b) **"Mechanical engineer"** does not mean a mechanical engineer who is employed by a school district or who is affiliated with a contractor hired by a school district to carry out the work required under sections 1 to 7 of this 2023 Act.

(5)(a) **"Mechanical ventilation system"** means a building ventilation system consisting of permanent, mechanically powered equipment, such as motor-driven fans and blowers.

(b) **"Mechanical ventilation system"** does not include devices such as wind-driven turbine ventilators, portable air cleaning and filtration devices and mechanically operated windows.

(6) **"Ppm"** means parts per million.

(7) **"Qualified adjusting personnel"** means:

(a) **A certified TAB technician; or**

NOTE: Matter in **boldfaced** type in an amended section is new; matter *[italic and bracketed]* is existing law to be omitted. New sections are in **boldfaced** type.

1 (b) An individual working under the on-site supervision of a certified TAB technician.

2 (8) "Qualified testing personnel" means:

3 (a) A certified TAB technician; or

4 (b) A person certified to perform ventilation verification assessments of HVAC systems
5 through a certification body accredited by the American National Standards Institute Na-
6 tional Accreditation Board.

7 (9) "School district" has the meaning given that term in ORS 332.002.

8 (10) "Specialty code" has the meaning given that term in ORS 455.010.

9 (11) "Training agent" has the meaning given that term in ORS 660.010.

10 **SECTION 2.** (1) Whenever a school district undertakes indoor HVAC infrastructure im-
11 provements using federal and state funds made available to the school district specifically for
12 such purposes, the school district shall expend such funds toward carrying out the provisions
13 of this section. A school district is not obligated to carry out the provisions of this section
14 until funds are so expended.

15 (2) A school district shall have a ventilation verification assessment performed by quali-
16 fied testing personnel at each school facility. The assessment shall be performed at least
17 once every five years. The assessment shall include the following:

18 (a) A description of HVAC equipment model numbers or serial numbers and a general
19 description of HVAC equipment.

20 (b) Testing to determine maximum filter efficiency.

21 (c) A calculation of the minimum outside air ventilation rates for each occupied area
22 based on anticipated occupancy and the minimum required ventilation rate per occupant, as
23 described in the minimum ventilation rate requirements set forth in the applicable specialty
24 code.

25 (d) Physical measurements of outside air rates.

26 (e) Verification of the proper operation of ventilation components in accordance with
27 applicable standards set forth in the specialty code.

28 (f) Measurement of all air distribution inlets and outlets.

29 (g) Verification of the proper operation of the HVAC system and that required mainte-
30 nance has been performed in accordance with ASHRAE Standard 62.1-2022, Section 8 and
31 Table 8-1 and any applicable specialty code.

32 (h) Verification of control sequences in accordance with the applicable standards set
33 forth in the specialty code.

34 (i) The collection of field data for the installation of a mechanical ventilation system, if
35 no mechanical ventilation system exists at the school facility.

36 (3) Qualified testing personnel shall record the results of the assessment in a report and
37 submit the report for review by a mechanical engineer as described in section 4 of this 2023
38 Act.

39 **SECTION 3.** (1) Whenever a school district undertakes indoor HVAC infrastructure im-
40 provements using federal and state funds made available to the school district specifically for
41 such purposes, the school district shall expend such funds toward carrying out the provisions
42 of this section. A school district is not obligated to carry out the provisions of this section
43 until funds are so expended.

44 (2) A school district shall ensure that each classroom is equipped with a carbon dioxide
45 monitor that meets applicable standards required for carbon dioxide monitors under the

1 specialty code and that each monitor:

2 (a) Is mounted to a wall between three and six feet above the floor and at least five feet
3 away from doors and operable windows.

4 (b) Displays, at a minimum, carbon dioxide level readings that are readily visible to an
5 individual who is inside the classroom.

6 (c) Provides notification by a visual indicator on the monitor that is made readily visible
7 to an individual who is inside the classroom when carbon dioxide levels in the classroom ex-
8 ceed 1,100 ppm.

9 (d) Maintains a record of previous data, which includes at least the maximum carbon
10 dioxide concentrations measured.

11 (e) Has a range of at least 400 to 5,000 ppm.

12 (f) Is certified by the manufacturer to be accurate within 75 ppm at 1,000 ppm carbon
13 dioxide concentration and is certified by the manufacturer to require calibration no more
14 frequently than once every five years.

15 (3) Qualified testing personnel shall assess whether carbon dioxide monitors meet the
16 requirements of this section and include the assessment in the report submitted to a me-
17 chanical engineer under section 4 of this 2023 Act.

18 (4)(a) If a classroom carbon dioxide concentration alarm setpoint is exceeded for more
19 than 15 minutes more than four times during a month, classroom ventilation rates shall be
20 adjusted or a direct outside airflow intake flow measurement device installed, and its accu-
21 racy verified, to ensure that peak carbon dioxide concentrations in the classroom remain
22 below the setpoint.

23 (b) Adjustments shall be performed by qualified adjusting personnel.

24 (c) Each school shall:

25 (A) Record all incidents where the setpoint is breached in a classroom and maintain these
26 records for at least five years.

27 (B) Upon request by a member of the public and free of charge, provide reasonable access
28 to review the records described in subparagraph (A) of this paragraph in the central office
29 of each school facility and in the central administrative office for each school district.

30 (d) Nothing in paragraph (c) of this subsection requires the Department of Education to
31 verify the contents of the records described in paragraph (c) of this subsection.

32 (5) The Department of Education may, by rules adopted under section 7 of this 2023 Act,
33 adjust the technical requirements for carbon dioxide monitors described in this section based
34 on technological developments and as is consistent with maintaining proper ventilation in
35 classrooms in accordance with any applicable standards set forth by the specialty code.

36 **SECTION 4.** (1) Whenever a school district undertakes indoor HVAC infrastructure im-
37 provements using federal and state funds made available to the school district specifically for
38 such purposes, the school district shall expend such funds toward carrying out the provisions
39 of this section. A school district is not obligated to carry out the provisions of this section
40 until funds are so expended.

41 (2) A school district shall obtain an HVAC assessment report prepared by qualified test-
42 ing personnel. The report shall include the results of the ventilation verification assessment
43 carried out under section 2 of this 2023 Act and a description of whether carbon dioxide
44 monitors meet the requirements of section 3 of this 2023 Act.

45 (3) A school district shall ensure that a mechanical engineer reviews the report prepared

1 under subsection (2) of this section. The mechanical engineer shall confirm or adjust the
2 estimated minimum outside air ventilation rates and determine what, if any, additional ad-
3 justments, repairs, upgrades or replacements would be necessary to meet the minimum
4 ventilation and filtration requirements of the specialty code, and provide a cost estimate for
5 all recommended work.

6 (4) A school district shall perform the necessary adjustments, repairs, upgrades or re-
7 placements recommended by the mechanical engineer under subsection (3) of this section.

8 **SECTION 5.** (1) A school district shall require a contractor carrying out work on projects
9 for indoor HVAC infrastructure improvements under sections 1 to 7 of this 2023 Act to:

10 (a) Participate as a training agent in an apprenticeship program registered with the State
11 Apprenticeship and Training Council to provide on-the-job training opportunities for appren-
12 tices in apprenticeable occupations to perform work on the project;

13 (b) Establish and implement a plan for outreach, recruitment and retention of women,
14 minority individuals and veterans to perform work on the project with the aspirational target
15 of having at least 15 percent of total work hours performed by individuals in one or more
16 of those groups;

17 (c) Pay wages to workers who perform work on the project at a rate that is no less than
18 the prevailing wage rate;

19 (d) Offer employer-paid family health insurance and retirement benefits to workers who
20 perform work on the project;

21 (e) Demonstrate a history of material compliance in the previous three years, or provide
22 available history for a new business, with federal and state wage and hour laws and applica-
23 ble prevailing wage rate laws;

24 (f) Demonstrate a history of material compliance in the previous three years, or provide
25 available history for a new business, with the rules and other requirements of state agencies
26 with oversight regarding occupational safety and health; and

27 (g) Ensure at all times during the duration of the project that work is performed by
28 qualified testing personnel or qualified adjusting personnel as required by sections 1 to 7 of
29 this 2023 Act.

30 (2)(a) In lieu of complying with the requirements described under subsection (1) of this
31 section, a contractor may provide the school district with a copy of a project labor agree-
32 ment and shall be exempted from the requirements described in subsection (1) of this sec-
33 tion.

34 (b) As used in this subsection, “project labor agreement” means a project labor agree-
35 ment as defined in 48 C.F.R. 52.222-34, as in effect on the effective date of this 2023 Act.

36 **SECTION 6.** (1) If a school district completes the work recommended by a mechanical
37 engineer under section 4 of this 2023 Act, the school district shall, within 30 days of com-
38 pleting the work, submit to the Department of Education an HVAC verification report that
39 includes:

40 (a) The name and address of the school facility and the name and address of the person
41 preparing the report.

42 (b) A description of assessment, maintenance, adjustment, repair, upgrade and replace-
43 ment activities performed and outcomes, including:

44 (A) The minimum efficiency reporting value of the filtration system.

45 (B) Verification that ventilation rates for facility classrooms, auditoriums, gymnasiums,

1 **nurses' offices, restrooms, offices and other occupiable indoor spaces meet the minimum**
2 **ventilation rate requirements set forth in the specialty code or an explanation of why the**
3 **current system is unable to meet those requirements.**

4 **(C) Verified exhaust rates for facility classrooms, auditoriums, gymnasiums, nurses' of-**
5 **fices, restrooms, offices and other occupiable indoor spaces and whether those rates meet**
6 **the requirements of the system design.**

7 **(D) Documentation of initial operating verifications, adjustments and final operating**
8 **verifications.**

9 **(E) Verification that carbon dioxide monitors have been installed and are operating in**
10 **compliance with section 3 of this 2023 Act.**

11 **(F) Verification that work performed satisfies the workforce standards described in sec-**
12 **tion 5 of this 2023 Act, including providing the names and certification or license numbers**
13 **of contractors, qualified testing personnel and qualified adjusting personnel.**

14 **(2) The department shall maintain a copy of the report required under this section for**
15 **at least five years.**

16 **(3) The HVAC verification report described in this section is subject to inspection as a**
17 **public record under ORS 192.311 to 192.478.**

18 **(4) Nothing in this section requires the department to verify the contents of a HVAC**
19 **verification report described in this section.**

20 **SECTION 7. The Department of Education may adopt rules as necessary to carry out**
21 **sections 1 to 7 of this 2023 Act.**

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