

116TH CONGRESS  
2D SESSION

# S. 3364

To improve the health and academic achievement of students in highly polluted environments, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

FEBRUARY 27, 2020

Mr. BOOKER introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

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## A BILL

To improve the health and academic achievement of students in highly polluted environments, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Clean Air Sharp Minds  
5 Act”.

6 **SEC. 2. PURPOSES.**

7 The purposes of this Act are—

8 (1) to improve the health and academic achieve-  
9 ment of students in highly polluted environments;

- 1           (2) to demonstrate the impacts of clean air at  
2       school on student learning and well-being; and  
3           (3) to support the Nation's schools to advance  
4       environmental justice.

5 **SEC. 3. FINDINGS.**

6       Congress finds the following:

7           (1) Substantial research demonstrates that air  
8       pollution negatively impacts health and cognition.

9           (2) More than 1 in 5 public schools in the  
10      United States are located within a mile of a toxic re-  
11      lease site. Nearly 1 in 11 public schools, serving  
12      4,400,000 students, are less than 500 feet from a  
13      major road.

14          (3) According to a 2017 report, 4 percent of  
15      schools serving predominantly White students are  
16      next to major roads, while 15 percent of schools  
17      serving largely students of color are next to major  
18      roads.

19          (4) Indoor levels of air pollutants can be 2 to  
20      5 times higher, and sometimes 100 times higher,  
21      than outdoor levels. In 2014, nearly half of schools  
22      in the United States reported having problems re-  
23      lated to indoor air quality.

1           (5) Schools in poor repair may have additional  
2           air quality problems, including lead, asbestos, dust,  
3           and radon contamination.

4           (6) Poor indoor air quality increases the risk of  
5           severe asthma attacks and allergic reactions. Asthma  
6           is the leading cause of missed school days in the  
7           United States.

8           (7) High-performance air filters can decrease  
9           indoor particulate matter by 90 percent.

10          (8) Research demonstrates the potential for  
11          school air filters to improve student learning. In  
12          2016, commercial air filters were installed in every  
13          classroom, office, and common area of 18 public  
14          schools in Los Angeles. Controlling for student de-  
15          mographics, mathematics test scores at these schools  
16          improved dramatically, nearly matching the impact  
17          of reducing class sizes by a third, and gains per-  
18          sisted the following the year.

19 **SEC. 4. DEFINITIONS.**

20          In this Act:

21           (1) ADMINISTRATOR.—The term “Adminis-  
22           trator” means the Administrator of the Environ-  
23           mental Protection Agency.

1           (2) COMMERCIAL AIR FILTER.—The term  
2       “commercial air filter” means an air filter unit  
3       that—

4           (A) removes particulate matter (including  
5       mold, smoke, dust, lead, soot, and allergens  
6       from pests) and gaseous pollutants (including  
7       carbon monoxide, sulfur dioxide, and volatile or-  
8       ganic compounds);

9           (B) does not produce any ozone;

10          (C) meets the American Society of Heat-  
11       ing, Refrigerating, and Air-Conditioning Engi-  
12       neers (ASHRAE) Minimum Efficiency Report-  
13       ing Value (MERV) of 13 (or the equivalent,  
14       using a different rating system); and

15          (D) contains activated carbon (charcoal)  
16       and a HEPA particle filter.

17       (3) ELIGIBLE SCHOOL.—The term “eligible  
18       school” means a public elementary school or sec-  
19       ondary school, as such terms are defined in section  
20       8101 of the Elementary and Secondary Education  
21       Act of 1965 (20 U.S.C. 7801).

22       (4) ENVIRONMENTAL JUSTICE.—The term “en-  
23       vironmental justice” means the fair treatment and  
24       meaningful involvement of all individuals, regardless  
25       of race, color, national origin, educational level, or

1 income, with respect to the development, implemen-  
2 tation, and enforcement of environmental laws, regu-  
3 lations, and policies to ensure that—

4 (A) populations of color, communities of  
5 color, indigenous communities, and low-income  
6 communities have access to public information  
7 and opportunities for meaningful public partici-  
8 pation relating to human health and environ-  
9 mental planning, regulations, and enforcement;

10 (B) no population of color or community of  
11 color, indigenous community, or low-income  
12 community shall be exposed to a dispropor-  
13 tionate burden of the negative human health  
14 and environmental impacts of pollution or other  
15 environmental hazards; and

16 (C) the “17 Principles of Environmental  
17 Justice”, written and adopted at the First Na-  
18 tional People of Color Environmental Leader-  
19 ship Summit held on October 24 through 27,  
20 1991, in Washington, DC, are upheld.

21 (5) SECRETARY.—The term “Secretary” means  
22 the Secretary of Education.

23 **SEC. 5. DEMONSTRATION PROGRAM AUTHORIZED.**

24 (a) IN GENERAL.—Not later than 6 months after the  
25 date of enactment of this Act, the Secretary and the Ad-

1 administrator shall enter into a memorandum of under-  
2 standing to jointly administer the School Air Filters Dem-  
3 onstration Program described in this section for a 3-year  
4 period.

5 (b) SELECTION OF ELIGIBLE SCHOOLS.—

6 (1) SELECTION OF ELIGIBLE SCHOOLS.—Not  
7 later than 12 months after the date of enactment of  
8 this Act, the Secretary and the Administrator shall  
9 select a minimum of 175 eligible schools to partici-  
10 pate in the School Air Filters Demonstration Pro-  
11 gram.

12 (2) PRIORITY.—In selecting eligible schools  
13 under this subsection, the Secretary and the Admin-  
14 istrator shall do so with the purpose of advancing  
15 environmental justice, giving priority—

16 (A) first, to eligible schools that are lo-  
17 cated in a nonattainment area for PM<sub>2.5</sub>,  
18 PM<sub>10</sub>, or ozone;

19 (B) second, to eligible schools that have  
20 school facilities that pose a severe health and  
21 safety threat to students and staff; and

22 (C) third, to eligible schools that have a  
23 high concentration of students from a low-in-  
24 come family.

1           (3) CONSIDERATIONS IN SELECTION.—In se-  
2       lecting eligible schools under this subsection, the  
3       Secretary and the Administrator—

4           (A) shall seek to select eligible schools that  
5       represent—

6           (i) a mix of elementary schools, mid-  
7       dle schools, and high schools; and

8           (ii) a mix of urban, suburban, and  
9       rural schools; and

10          (B) may consider any other eligibility re-  
11       quirements that the Secretary and the Adminis-  
12       trator determine are necessary to carry out the  
13       purposes of this Act.

14       (c) AGREEMENT TO PARTICIPATE.—The Secretary  
15       and the Administrator shall seek to enter into a written  
16       agreement with each eligible school selected under sub-  
17       section (b) to ensure that the eligible school desires to par-  
18       ticipate in the School Air Filters Demonstration Program.  
19       The Secretary and the Administrator shall carry out the  
20       activities under subsection (d) only with respect to partici-  
21       pating eligible schools that enter into such an agreement.

22       (d) USE OF FUNDS.—

23           (1) IN GENERAL.—The Secretary and the Ad-  
24       ministrator shall—

1 (A) purchase commercial air filters for the  
2 buildings of each participating eligible school;

3 (B) install a commercial air filter in every  
4 classroom, office, and common area that stu-  
5 dents access in each such school;

6 (C) maintain those air filters for a period  
7 of 3 years, including by ensuring the replace-  
8 ment of the internal carbon filters of those air  
9 filters according to a frequency as indicated by  
10 the manufacturer;

11 (D) provide technical support to eligible  
12 schools participating in the program, including  
13 training school staff on how to properly use the  
14 air filters; and

15 (E) using not more than 3.5 percent of the  
16 funds appropriated under subsection (f), collect,  
17 analyze, and submit data that is necessary for  
18 the report and evaluation described in sub-  
19 section (e).

20 (2) USE OF CONTRACTOR.—

21 (A) IN GENERAL.—Subject to subpara-  
22 graph (B), the activities described in subpara-  
23 graphs (B) and (C) of paragraph (1) may be  
24 carried out by an entity that—



1 (i) has a contract to do so with the  
 2 Administrator; and

3 (ii) has a State or local license or cer-  
 4 tification from a relevant professional or-  
 5 ganization allowing the entity to install  
 6 and maintain air filter units.

7 (B) COLLECTIVE BARGAINING AGREE-  
 8 MENT.—Notwithstanding subparagraph (A), if  
 9 a school or local educational agency’s collective  
 10 bargaining agreement stipulates that a school  
 11 staff member carry out the activities described  
 12 in subparagraphs (B) or (C) of paragraph (1),  
 13 the Administrator shall coordinate with the  
 14 local educational agency to arrange for school  
 15 staff to carry out those activities. Nothing in  
 16 this Act shall be construed to interfere with a  
 17 collective bargaining agreement.

18 (e) REPORTS AND EVALUATION.—

19 (1) ANNUAL REPORTS.—The Secretary and the  
 20 Administrator shall prepare and submit to Congress  
 21 an annual report containing—

22 (A) metrics that demonstrate the indoor  
 23 air quality (at a minimum, PM2.5 levels, as  
 24 well as any other air pollutants that the Admin-  
 25 istrator determines necessary to test) at 3 loca-

tions within each participating eligible school before installation of the commercial air filters, and subsequently twice per academic year, ensuring that the locations of that testing are kept consistent for each test);

(B) the pollutants that are captured by the air filters at participating eligible schools, as determined by annual tests conducted on the used air filters;

(C) metrics that demonstrate the academic outcomes of students at each participating eligible school (including standardized test scores);

(D) rates of suspension at each participating eligible school; and

(E) rates of school absence by students at each participating eligible school, including rates of school absence relating to asthma and other health measures.

(2) EVALUATION.—At the end of the 3-year School Air Filters Demonstration Program, the Secretary and the Administrator shall prepare and submit a report to Congress that includes an evaluation of the effectiveness of the School Air Filters Demonstration Program, including an analysis of the impact of the commercial air filters on student aca-

1       demic achievement and well-being, and on the pro-  
2       gram's potential to advance environmental justice.  
3       The evaluation shall include recommendations based  
4       on the findings from the School Air Filters Dem-  
5       onstration Program.

6       (f) AUTHORIZATION OF APPROPRIATIONS.—There  
7       are authorized to be appropriated to carry out this Act  
8       \$20,000,000 for fiscal year 2021.

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