

116<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

# S. 4369

To protect clean air and public health by expanding fenceline and ambient air monitoring and access to air quality information for communities affected by air pollution; to require immediate toxic air monitoring at the fenceline of facilities with pollution linked to local health threats; to ensure the Environmental Protection Agency promulgates rules that require fenceline air monitoring in communities with air polluting industrial source categories; to expand and strengthen the national ambient air quality monitoring network; to deploy air sensors in communities affected by air pollution, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

JULY 29, 2020

Ms. DUCKWORTH (for herself, Mr. BOOKER, Ms. WARREN, Mr. MERKLEY, Mr. MARKEY, and Mr. DURBIN) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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## A BILL

To protect clean air and public health by expanding fenceline and ambient air monitoring and access to air quality information for communities affected by air pollution; to require immediate toxic air monitoring at the fenceline of facilities with pollution linked to local health threats; to ensure the Environmental Protection Agency promulgates rules that require fenceline air monitoring in communities with air polluting industrial source categories; to expand and strengthen the national ambient air quality monitoring network; to deploy air sensors in communities affected by air pollution, 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 “Public Health Air  
5 Quality Act of 2020”.

6 **SEC. 2. HEALTH EMERGENCY AIR TOXICS MONITORING.**

7        (a) MONITORING.—Not later than 120 days after the  
8 date of enactment of this Act, the Administrator shall  
9 carry out a program to administer or conduct, pursuant  
10 to authority provided under the Clean Air Act (42 U.S.C.  
11 7401 et seq.), including section 114 of such Act (42  
12 U.S.C. 7414), the best available form of fence-line moni-  
13 toring of stationary sources of hazardous air pollutants  
14 that are on the list developed under subsection (c).

15        (b) PUBLICATION OF RESULTS.—The Administrator  
16 shall publish and maintain the results of all fence-line moni-  
17 toring conducted under the program under subsection (a)  
18 on the website of the Environmental Protection Agency  
19 for a period of at least 5 years.

20        (c) LIST OF SOURCES.—

21            (1) DEVELOPMENT.—The Administrator shall  
22 develop a list of stationary sources of hazardous air  
23 pollutants that includes—

24                    (A) the 25 high-priority facilities listed in  
25 Appendix A of the Environmental Protection

1 Agency's Office of Inspector General Report  
2 #20-N-0128 (March 31, 2020); and

3 (B) at least another 25 major sources or  
4 synthetic area sources.

5 (2) REQUIREMENTS.—The Administrator may  
6 include a stationary source on the list developed  
7 under paragraph (1) only if the source—

8 (A) emits at least one of the pollutants de-  
9 scribed in paragraph (3);

10 (B) is—

11 (i) located in, or within 3 miles of, a  
12 census tract with—

13 (I) a cancer risk of at least 100-  
14 in-1 million; or

15 (II) a chronic non-cancer hazard  
16 index that is above 1 based on the  
17 most recent National Air Toxics As-  
18 sessment; or

19 (ii) in a source category with—

20 (I) a cancer risk that is at least  
21 50-in-1 million;

22 (II) a total organ-specific hazard  
23 index for chronic non-cancer risk that  
24 is greater than 1; or

1 (III) an acute risk hazard  
2 quotient that is greater than 1; and

3 (C) is—

4 (i) classified in one or more of North  
5 American Industry Classification System  
6 codes 322, 324, 325; or

7 (ii) required to prepare and implement  
8 a risk management plan pursuant to sec-  
9 tion 112(r) of the Clean Air Act (42  
10 U.S.C. 7412(r)) and had an accidental re-  
11 lease required to be reported during the  
12 previous 3 years pursuant to section 68.42  
13 or 68.195 of title 40 Code of Federal Reg-  
14 ulations (as in effect on the date of enact-  
15 ment of this Act).

16 (3) POLLUTANTS.—The pollutants described in  
17 this paragraph are ethylene oxide, chloroprene, ben-  
18 zene, 1,3-butadiene, and formaldehyde.

19 (d) METHODS AND TECHNOLOGIES.—

20 (1) IN GENERAL.—Except as provided in para-  
21 graph (2), in carrying out the program under sub-  
22 section (a), the Administrator shall—

23 (A) for each stationary source on the list  
24 developed under subsection (c)(1), employ, as  
25 necessary to monitor the pollutants described in

1 subsection (c)(3) emitted by such stationary  
2 source, at least—

3 (i) Method 325A and Method 325B;

4 and

5 (ii) Method TO-15; and

6 (B) for each of the 10 stationary sources  
7 on such list that either emit the greatest volume  
8 of pollutants described in subsection (c)(3), or  
9 cause the greatest health risk as determined by  
10 the Administrator based on a residual risk as-  
11 sessment performed pursuant to section  
12 112(f)(2) of the Clean Air Act (42 U.S.C.  
13 7412(f)(2)) or based on the most recent Na-  
14 tional Air Toxics Assessment due to such emis-  
15 sions individually, as a group, or cumulatively  
16 with all hazardous air pollutants emitted by  
17 such sources, and for any other stationary  
18 source on such list for which application of the  
19 methods described in subparagraph (A) alone  
20 will not be sufficient to monitor and report any  
21 such pollutants that are emitted by such sta-  
22 tionary source, employ—

23 (i) optical remote sensing technology  
24 to provide real-time measurements of air

1 pollutant concentrations along an open-  
2 path; or

3 (ii) other monitoring technology with  
4 the ability to provide real-time spatial and  
5 temporal data to understand the type and  
6 amount of emissions.

7 (2) UPDATES.—

8 (A) METHOD 325A AND METHOD 325B.—If  
9 the Administrator determines it necessary to  
10 update Method 325A and Method 325B to im-  
11 plement this section, the Administrator shall  
12 update such Method 325A and Method 325B  
13 not later than 90 days after the date of enact-  
14 ment of this Act.

15 (B) NEW TEST METHOD.—If the Adminis-  
16 trator determines it necessary to approve a new  
17 test method to implement this section, the Ad-  
18 ministrator shall finalize such a method not  
19 later than 1 year after the date of enactment of  
20 this Act.

21 (e) REPORT.—Not later than 18 months after the  
22 date of enactment of this Act, the Administrator shall re-  
23 port on the results of the program carried out under sub-  
24 section (a), including—

1           (1) the results of fenceline monitoring imple-  
2           mented under the program under subsection (a);

3           (2) any enforcement, regulatory, or permitting  
4           actions taken based on such fenceline monitoring;  
5           and

6           (3) whether the Administrator proposes to con-  
7           tinue fenceline monitoring at any or all of the sta-  
8           tionary sources on the list developed under sub-  
9           section (c)(1), or to implement fenceline monitoring  
10          of any additional stationary sources as determined  
11          under subsection (f).

12          (f) DETERMINATION REGARDING ADDITIONAL  
13 SOURCES.—Not later than 3 months before the program  
14 under subsection (a) terminates, the Administrator shall  
15 make a determination, and publish such determination in  
16 the Federal Register, on whether to add fenceline moni-  
17 toring for any stationary sources to—

18           (1) ensure compliance of such stationary  
19           sources with existing emission standards under sec-  
20           tion 112 of the Clean Air Act (42 U.S.C. 7412);

21           (2) prevent accidental releases; or

22           (3) protect the health of the communities most  
23           exposed to the emissions of hazardous air pollutants  
24           from such stationary sources to the greatest extent  
25           possible.

1 (g) DETERMINATION REGARDING EMISSION FAC-  
2 TORS.—Not later than 3 months before the program  
3 under subsection (a) terminates, the Administrator shall  
4 complete an evaluation and promulgate a determination  
5 whether any existing emission factors must be updated to  
6 better reflect or account for the results of fenceline moni-  
7 toring data collected pursuant to Method 325A or 325B  
8 or the program under subsection (a).

9 (h) AUTHORIZATION OF APPROPRIATIONS.—There is  
10 authorized to be appropriated to carry out this section  
11 \$73,000,000 for fiscal year 2021.

12 **SEC. 3. COMMUNITY AIR TOXICS MONITORING.**

13 (a) REGULATIONS.—Not later than one year after the  
14 date of enactment of this Act, the Administrator shall pro-  
15 mulgate regulations pursuant to section 112(d) of the  
16 Clean Air Act (42 U.S.C. 7412(d)) for each source cat-  
17 egory described in subsection (b), that—

18 (1) require all sources in such source category  
19 to implement the best available form of continuous  
20 emissions monitoring and fenceline monitoring to as-  
21 sure compliance with the emission standards for haz-  
22 ardous air pollutants;

23 (2) for facilities in such source category that  
24 are required to submit risk management plans under  
25 section 112(r) of the Clean Air Act, to prevent acci-



1 dental releases and provide for effective emergency  
2 response;

3 (3) establish a corrective action level at the  
4 fence-line for at least the top 3 hazardous air pollut-  
5 ants that drive the cancer, chronic non-cancer, or  
6 acute risk for the source category; and

7 (4) require a root cause analysis and con-  
8 sequences if such corrective action level is exceeded.

9 (b) SOURCE CATEGORIES.—The source categories de-  
10 scribed in this subsection shall include each category or  
11 subcategory of major sources or area sources containing—

12 (1) at least one of the stationary sources of  
13 hazardous air pollutants that are on the list devel-  
14 oped under section 2(c);

15 (2) major sources or area sources identified in  
16 the most recent National Emissions Inventory of the  
17 Environmental Protection Agency as emitting ethyl-  
18 ene oxide, chloroprene, 1–3 butadiene, benzene, or  
19 formaldehyde;

20 (3) chemical, petrochemical, or plastics manu-  
21 facturing sources or marine vessel loading oper-  
22 ations; and

23 (4) any other major sources of fugitive haz-  
24 ardous air pollutant emissions for which the Envi-  
25 ronmental Protection Agency is subject to a court-

1 ordered or statutory deadline, engaged in a reconsid-  
2 eration proceeding, or subject to a court remand to,  
3 not later than 2 years after the date of enactment  
4 of this Act, review and determine whether to revise  
5 the emissions standards that apply to such sources.

6 (c) DETERMINATION OF BEST AVAILABLE FORM OF  
7 MONITORING.—The Administrator, in consultation with  
8 the Office of Air Quality Planning and Standards, the Of-  
9 fice of Enforcement and Compliance Assurance, and the  
10 Office of Environmental Justice, shall, for purposes of the  
11 regulations promulgated pursuant to subsection (a), deter-  
12 mine the best available form of continuous emissions mon-  
13 itoring and fence-line monitoring and shall ensure the  
14 methods required are at least as stringent as Method  
15 325A and Method 325B.

16 (d) METHODS AND TECHNOLOGIES.—For all sta-  
17 tionary sources in the source categories under subsection  
18 (b), the Administrator shall, in the regulations promul-  
19 gated pursuant to subsection (a)—

20 (1) require application, implementation, or em-  
21 ployment of—

22 (A) Method TO-15 or optical remote sens-  
23 ing technology to provide real-time measure-  
24 ments of air pollutant concentrations along an  
25 open-path; or

1 (B) other monitoring technology with the  
2 ability to provide real-time spatial and temporal  
3 data to understand the type and amount of  
4 emissions; or

5 (2) provide an explanation of why application of  
6 Method TO-15 or the technologies described in  
7 paragraph (1) is not necessary—

8 (A) to assure compliance with the emission  
9 standards established under the regulations  
10 promulgated pursuant to subsections (d) and  
11 (f) of section 112 of the Clean Air Act (42  
12 U.S.C. 7412), as applicable; or

13 (B) to protect the public health.

14 (e) PRECAUTIONARY APPROACH.—In promulgating  
15 the corrective action level for each of the hazardous air  
16 pollutants described in subsection (a)(3), the Adminis-  
17 trator shall take a precautionary approach to ensure that,  
18 if the monitored concentration at the fenceline hits a level  
19 that has potential to cause any person to experience im-  
20 paired quality of life, become ill, or die from cancer or  
21 any other chronic or acute health impairment related to  
22 short- or long-term air pollution exposure (including any  
23 fetal exposure that begins in utero), that the facility must  
24 reduce its emissions to prevent such harm.

1 (f) AUTHORIZATION OF APPROPRIATIONS.—There is  
2 authorized to be appropriated to carry out this section  
3 \$17,500,000 for fiscal year 2021.

4 **SEC. 4. CRITERIA POLLUTANT/NAAQS MONITORING NET-**  
5 **WORK.**

6 (a) DEPLOYMENT OF NCore MULTIPOLLUTANT  
7 MONITORING STATIONS.—The Administrator shall re-  
8 quire an additional 80 NCore multipollutant monitoring  
9 stations.

10 (b) DEADLINE.—Not later than 12 months after the  
11 date of enactment of this Act, the Administrator shall en-  
12 sure all NCore multipollutant monitoring stations required  
13 to be deployed under subsection (a) are installed and inte-  
14 grated into the air quality monitoring system established  
15 pursuant to section 319 of the Clean Air Act (42 U.S.C.  
16 7619).

17 (c) MONITORING RESULTS.—Monitoring results from  
18 NCore multipollutant stations deployed pursuant to sub-  
19 section (a) shall be used for purposes of comparison to  
20 national ambient air quality standards, and for such other  
21 purposes as the Administrator determines will promote the  
22 protection of public health from air pollution.

23 (d) LOCATIONS.—

24 (1) VULNERABLE POPULATIONS.—

1 (A) CENSUS TRACTS.—The Administrator  
2 shall ensure that at least 40 of the NCore  
3 multi-pollutant monitoring stations required  
4 under subsection (a) are sited in census tracts  
5 that each meet one or more of the following cri-  
6 teria:

7 (i) The rates of childhood asthma,  
8 adult asthma, chronic obstructive pul-  
9 monary disease, heart disease, or cancer  
10 are higher than the national average for  
11 such condition in the census tract.

12 (ii) The percentage of people living  
13 below the poverty level, that are above age  
14 18 without a high school diploma, or that  
15 are unemployed, is higher than the na-  
16 tional average in the census tract.

17 (iii) Two or more major sources (as  
18 defined in section 501(2) of the Clean Air  
19 Act (42 U.S.C. 7661(2))) are located with-  
20 in the census tract and adjacent census  
21 tracts combined.

22 (iv) COVID–19 death rates are at  
23 least 10 percent higher than the national  
24 average in the census tract.

1           (v) There is a higher than average  
2           population in the census tract of vulnerable  
3           or sensitive individuals who may be at  
4           greater risk than the general population of  
5           adverse health effects from exposure to one  
6           or more air pollutants for which national  
7           ambient air quality standards have been  
8           established pursuant to the Clean Air Act  
9           (42 U.S.C. 7401 et seq.), including in-  
10          fants, children, pregnant women, workers,  
11          the elderly, or individuals living in an envi-  
12          ronmental justice community.

13           (B) LIMITATION.—Not more than 1 of the  
14          NCore multipollutant monitoring stations de-  
15          scribed in subparagraph (A) may be sited with-  
16          in the same metropolitan statistical area, mu-  
17          nicipality, or county.

18           (2) SITING DETERMINATIONS.—In determining  
19          and approving sites for NCore multipollutant moni-  
20          toring stations required under subsection (a), the  
21          Administrator shall—

22           (A) invite proposals from or on behalf of  
23          residents of a community for the siting of such  
24          stations in such community;

1 (B) prioritize siting of such stations in  
2 census tracts or counties with per capita death  
3 rates from COVID–19 that are at least 10 per-  
4 cent higher than the national average, as of the  
5 date of enactment of this Act or the date of the  
6 proposal; and

7 (C) prior to making siting determinations,  
8 provide public notice of proposed siting loca-  
9 tions and provide an opportunity for public  
10 comment for at least 30 days thereafter—

11 (i) in the Federal Register, by email  
12 to persons who have requested notice of  
13 proposed siting determinations; by news re-  
14 lease; and

15 (ii) by posting on the public website of  
16 the Environmental Protection Agency.

17 (e) REPORT.—Not later than 4 months after the date  
18 of enactment of this Act, the Administrator shall—

19 (1) in coordination with the States, complete an  
20 assessment, which includes public input, on the sta-  
21 tus of all ambient air quality monitors that are part  
22 of Federal, State, or local networks and used for de-  
23 termining compliance with national ambient air  
24 quality standards to determine whether each such  
25 monitor is operational; and

1           (2) report to Congress, and publish on the pub-  
2       lic website of the Environmental Protection Agency,  
3       a list of all non-operational monitors and an accom-  
4       panying schedule and plan to restore all such mon-  
5       itors into full operation within one year.

6       (f) FUNDING.—

7           (1) AUTHORIZATION OF APPROPRIATIONS.—

8       There is authorized to be appropriated to carry out  
9       this section \$61,000,000 for fiscal year 2021.

10          (2) USES.—The Administrator—

11           (A) may use amounts made available to  
12       carry this section to—

13           (i) directly to deploy NCore multi-  
14       pollutant monitoring stations required  
15       under subsection (a); or

16           (ii) make grants under section 105 of  
17       the Clean Air Act to State and local gov-  
18       ernments for deployment and operation of  
19       such NCore multipollutant monitoring sta-  
20       tions; and

21           (B) shall use at least 5 percent, but not  
22       more than 10 percent, of amounts made avail-  
23       able to carry out this section to perform main-  
24       tenance and repairs necessary to restore to op-  
25       eration to currently non-operational monitors



1           located in nonattainment areas for ozone or  
2           PM2.5.

3 **SEC. 5. SENSOR MONITORING.**

4           (a) DEPLOYMENT OF AIR QUALITY SENSORS.—Not  
5 later than 6 months after the date of enactment of this  
6 Act, the Administrator shall deploy at least 1,000 air qual-  
7 ity sensors, that each cost \$2,000 or less, in census tracts  
8 or counties with per capita death rates from COVID–19  
9 that are at least 10 percent higher than the national aver-  
10 age as of the date of enactment of this Act.

11          (b) POLLUTANTS.—Each sensor deployed pursuant  
12 to subsection (a) shall measure ozone, PM2.5, or sulfur  
13 dioxide. The Administrator shall determine which pollut-  
14 ant or pollutants to monitor based on the pollution sources  
15 affecting the area in which the sensor is to be deployed.

16          (c) PRIORITY.—The Administrator shall give priority  
17 for deployment of sensors pursuant to subsection (a) to  
18 census tracts or counties that—

19           (1) lack SLAMS for the pollutant or pollutants  
20           that sensors would be deployed to measure;

21           (2) have, or are substantially impacted by, sig-  
22           nificant emissions of ozone, PM2.5, or sulfur diox-  
23           ide; and

1           (3) are not part of an area designated as non-  
2           attainment under the Clean Air Act for the air pol-  
3           lutant or pollutants to be monitored.

4           (d) CONTRACTS.—The Administrator shall contract  
5           with qualified nonprofit organizations and State and local  
6           air pollution control agencies to execute deployment of the  
7           monitors in a manner that will ensure representative  
8           measurement of ambient air quality, and provide the pub-  
9           lic with real-time online access to the data collected.

10          (e) DETERMINATION AND INSTALLATION.—Not later  
11          than 6 months after one year of monitoring with sensors  
12          deployed pursuant to subsection (a) has been completed,  
13          the Administrator shall determine whether data from the  
14          sensor or sensors deployed in a census tract or county  
15          show air pollution levels during such year reached 98 per-  
16          cent of the national ambient air quality standard for any  
17          of the air pollutants described in subsection (b), and not  
18          later than 6 months after such determination, the Admin-  
19          istrator shall ensure that Federal Reference Method mon-  
20          itors or Federal Equivalent Method monitors are installed  
21          and in operation within the census tract or county for each  
22          pollutant that reached or exceeded the 98 percent level.

23          (f) AUTHORIZATION OF APPROPRIATIONS.—There is  
24          authorized to be appropriated to carry out this section  
25          \$2,500,000.

1 **SEC. 6. ENVIRONMENTAL HEALTH DISPARITIES RESEARCH**  
2 **GRANT PROGRAMS.**

3 (a) CENTERS OF EXCELLENCE ON ENVIRONMENTAL  
4 HEALTH DISPARITIES RESEARCH GRANTS.—The Direc-  
5 tor of the National Institutes of Health, in coordination  
6 with the National Center for Environmental Research at  
7 the Environmental Protection Agency, shall carry out a  
8 Centers of Excellence on Environmental Health Dispari-  
9 ties Research grant program. Such program shall estab-  
10 lish and support no fewer than 10 research centers with  
11 5 year awards to—

12 (1) conduct basic and applied research on envi-  
13 ronmentally driven health disparities;

14 (2) establish, develop, or expand collaborations  
15 with other researchers and organizations involved in  
16 environmental health disparities and affected com-  
17 munities;

18 (3) disseminate scientific knowledge to other re-  
19 searchers and members of affected communities;

20 (4) recruit and mentor investigators to conduct  
21 environmental health disparities research, including  
22 investigators from health disparities populations;  
23 and

24 (5) other activities, as determined by the Direc-  
25 tor.

1 (b) AUTHORIZATION OF APPROPRIATIONS.—There  
2 are authorized to be appropriated to carry out this pro-  
3 gram \$15,000,000 for each of fiscal years 2021 thru  
4 2026.

5 **SEC. 7. DEFINITIONS.**

6 In this Act:

7 (1) ADMINISTRATOR.—The term “Adminis-  
8 trator” means the Administrator of the Environ-  
9 mental Protection Agency.

10 (2) ACCIDENTAL RELEASE.—The term “acci-  
11 dental release” has the meaning given such term in  
12 section 112(r) of the Clean Air Act (42 U.S.C.  
13 7412(r)).

14 (3) AREA SOURCE; EXISTING SOURCE; HAZ-  
15 ARDOUS AIR POLLUTANT; MAJOR SOURCE; NEW  
16 SOURCE; STATIONARY SOURCE.—Except as otherwise  
17 provided, the terms “area source”, “existing  
18 source”, “hazardous air pollutant”, “major source”,  
19 “new source”, and “stationary source” have the  
20 meaning given such terms in section 112(a) of the  
21 Clean Air Act (42 U.S.C. 7412(a)).

22 (4) COVID-19.—The term “COVID-19”  
23 means the novel coronavirus disease 2019 that is the  
24 subject of the declaration of a public health emer-  
25 gency by the Secretary of Health and Human Serv-

1 ices pursuant to section 319 of the Public Health  
2 Service Act (42 U.S.C. 247d) on January 27, 2020.

3 (5) METHOD 325A.—The term “Method 325A”  
4 means the Air Emission Measurement Center pro-  
5 mulgated test method titled “Volatile Organic Com-  
6 pounds from Fugitive and Area Sources: Sampler  
7 Deployment and VOC Sample Collection”.

8 (6) METHOD 325B.—The term “Method 325B”  
9 means the Air Emission Measurement Center pro-  
10 mulgated test method titled “Volatile Organic Com-  
11 pounds from Fugitive and Area Sources: Sampler  
12 Preparation and Analysis.”

13 (7) METHOD TO-15.—The term “Method TO-  
14 15” means the test method titled “Determination of  
15 Volatile Organic Compounds (VOCs) In Air Col-  
16 lected In Specially-Prepared Canisters And Analyzed  
17 By Gas Chromatography Mass Spectrometry (GC/  
18 MS)” published in Compendium of Methods for the  
19 Determination of Toxic Organic Compounds in Am-  
20 bient Air, Second Edition.

21 (8) NCORE AND SLAMS.—The terms “NCore”  
22 and “SLAMS” have the meaning given such terms  
23 in section 58.1 of title 40, Code of Federal Regula-  
24 tions (as in effect on the date of enactment of this  
25 Act).

1           (9) SYNTHETIC AREA SOURCE.—The term  
2           “synthetic area source” has the meaning given “syn-  
3           thetic minor HAP source” in section 49.152 of title  
4           40, Code of Federal Regulations (or successor regu-  
5           lations).

○