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.

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

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

SECTION 1. SHORT TITLE.

This Act may be cited as the “Public Health Air
Quality Act of 2020”.

SEC. 2. HEALTH EMERGENCY AIR TOXICS MONITORING.

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

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

(c) LIST OF SOURCES.—

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

(A) the 25 high-priority facilities listed in
Appendix A of the Environmental Protection
Agency’s Office of Inspector General Report
#20–N–0128 (March 31, 2020); and

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

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

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

(B) is—

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

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

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

(ii) in a source category with—

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

(II) a total organ-specific hazard
index for chronic non-cancer risk that
is greater than 1; or
(III) an acute risk hazard quotient that is greater than 1; and

(C) is—

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

(ii) required to prepare and implement a risk management plan pursuant to section 112(r) of the Clean Air Act (42 U.S.C. 7412(r)) and had an accidental release required to be reported during the previous 3 years pursuant to section 68.42 or 68.195 of title 40 Code of Federal Regulations (as in effect on the date of enactment of this Act).

(3) POLLUTANTS.—The pollutants described in this paragraph are ethylene oxide, chloroprene, benzene, 1,3-butadiene, and formaldehyde.

(d) METHODS AND TECHNOLOGIES.—

(1) IN GENERAL.—Except as provided in paragraph (2), in carrying out the program under subsection (a), the Administrator shall—

(A) for each stationary source on the list developed under subsection (c)(1), employ, as necessary to monitor the pollutants described in
subsection (c)(3) emitted by such stationary source, at least—

(i) Method 325A and Method 325B;

and

(ii) Method TO–15; and

(B) for each of the 10 stationary sources on such list that either emit the greatest volume of pollutants described in subsection (c)(3), or cause the greatest health risk as determined by the Administrator based on a residual risk assessment performed pursuant to section 112(f)(2) of the Clean Air Act (42 U.S.C. 7412(f)(2)) or based on the most recent National Air Toxics Assessment due to such emissions individually, as a group, or cumulatively with all hazardous air pollutants emitted by such sources, and for any other stationary source on such list for which application of the methods described in subparagraph (A) alone will not be sufficient to monitor and report any such pollutants that are emitted by such stationary source, employ—

(i) optical remote sensing technology to provide real-time measurements of air
pollutant concentrations along an open-path; or

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

(2) Updates.—

(A) Method 325A and Method 325B.—If the Administrator determines it necessary to update Method 325A and Method 325B to implement this section, the Administrator shall update such Method 325A and Method 325B not later than 90 days after the date of enactment of this Act.

(B) New Test Method.—If the Administrator determines it necessary to approve a new test method to implement this section, the Administrator shall finalize such a method not later than 1 year after the date of enactment of this Act.

(e) Report.—Not later than 18 months after the date of enactment of this Act, the Administrator shall report on the results of the program carried out under subsection (a), including—
(1) the results of fenceline monitoring implemented under the program under subsection (a);

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

(3) whether the Administrator proposes to continue fenceline monitoring at any or all of the stationary sources on the list developed under subsection (c)(1), or to implement fenceline monitoring of any additional stationary sources as determined under subsection (f).

(f) Determination Regarding Additional Sources.—Not later than 3 months before the program under subsection (a) terminates, the Administrator shall make a determination, and publish such determination in the Federal Register, on whether to add fenceline monitoring for any stationary sources to—

(1) ensure compliance of such stationary sources with existing emission standards under section 112 of the Clean Air Act (42 U.S.C. 7412);

(2) prevent accidental releases; or

(3) protect the health of the communities most exposed to the emissions of hazardous air pollutants from such stationary sources to the greatest extent possible.
(g) Determination Regarding Emission Factors.—Not later than 3 months before the program under subsection (a) terminates, the Administrator shall complete an evaluation and promulgate a determination whether any existing emission factors must be updated to better reflect or account for the results of fenceline monitoring data collected pursuant to Method 325A or 325B or the program under subsection (a).

(h) Authorization of Appropriations.—There is authorized to be appropriated to carry out this section $73,000,000 for fiscal year 2021.

SEC. 3. Community Air Toxics Monitoring.

(a) Regulations.—Not later than one year after the date of enactment of this Act, the Administrator shall promulgate regulations pursuant to section 112(d) of the Clean Air Act (42 U.S.C. 7412(d)) for each source category described in subsection (b), that—

(1) require all sources in such source category to implement the best available form of continuous emissions monitoring and fenceline monitoring to assure compliance with the emission standards for hazardous air pollutants;

(2) for facilities in such source category that are required to submit risk management plans under section 112(r) of the Clean Air Act, to prevent acci-
dental releases and provide for effective emergency response;

(3) establish a corrective action level at the fenceline for at least the top 3 hazardous air pollutants that drive the cancer, chronic non-cancer, or acute risk for the source category; and

(4) require a root cause analysis and consequences if such corrective action level is exceeded.

(b) SOURCE CATEGORIES.—The source categories described in this subsection shall include each category or subcategory of major sources or area sources containing—

(1) at least one of the stationary sources of hazardous air pollutants that are on the list developed under section 2(c);

(2) major sources or area sources identified in the most recent National Emissions Inventory of the Environmental Protection Agency as emitting ethylene oxide, chloroprene, 1–3 butadiene, benzene, or formaldehyde;

(3) chemical, petrochemical, or plastics manufacturing sources or marine vessel loading operations; and

(4) any other major sources of fugitive hazardous air pollutant emissions for which the Environmental Protection Agency is subject to a court-
ordered or statutory deadline, engaged in a reconsideration proceeding, or subject to a court remand to, not later than 2 years after the date of enactment of this Act, review and determine whether to revise the emissions standards that apply to such sources.

(c) **Determinations of Best Available Form of Monitoring.**—The Administrator, in consultation with the Office of Air Quality Planning and Standards, the Office of Enforcement and Compliance Assurance, and the Office of Environmental Justice, shall, for purposes of the regulations promulgated pursuant to subsection (a), determine the best available form of continuous emissions monitoring and fenceline monitoring and shall ensure the methods required are at least as stringent as Method 325A and Method 325B.

(d) **Methods and Technologies.**—For all stationary sources in the source categories under subsection (b), the Administrator shall, in the regulations promulgated pursuant to subsection (a)—

(1) require application, implementation, or employment of—

(A) Method TO–15 or optical remote sensing technology to provide real-time measurements of air pollutant concentrations along an open-path; or
(B) other monitoring technology with the
ability to provide real-time spatial and temporal
data to understand the type and amount of
emissions; or

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

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

(B) to protect the public health.

(e) PRECAUTIONARY APPROACH.—In promulgating
the corrective action level for each of the hazardous air
pollutants described in subsection (a)(3), the Adminis-
trator shall take a precautionary approach to ensure that,
if the monitored concentration at the fenceline hits a level
that has potential to cause any person to experience im-
paired quality of life, become ill, or die from cancer or
any other chronic or acute health impairment related to
short- or long-term air pollution exposure (including any
fetal exposure that begins in utero), that the facility must
reduce its emissions to prevent such harm.
(f) Authorization of Appropriations.—There is authorized to be appropriated to carry out this section $17,500,000 for fiscal year 2021.

SEC. 4. CRITERIA POLLUTANT/NAQS MONITORING NETWORK.

(a) Deployment of NCORE Multipollutant Monitoring Stations.—The Administrator shall require an additional 80 NCORE multipollutant monitoring stations.

(b) Deadline.—Not later than 12 months after the date of enactment of this Act, the Administrator shall ensure all NCORE multipollutant monitoring stations required to be deployed under subsection (a) are installed and integrated into the air quality monitoring system established pursuant to section 319 of the Clean Air Act (42 U.S.C. 7619).

(c) Monitoring Results.—Monitoring results from NCORE multipollutant stations deployed pursuant to subsection (a) shall be used for purposes of comparison to national ambient air quality standards, and for such other purposes as the Administrator determines will promote the protection of public health from air pollution.

(d) Locations.—

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

(i) The rates of childhood asthma, adult asthma, chronic obstructive pulmonary disease, heart disease, or cancer are higher than the national average for such condition in the census tract.

(ii) The percentage of people living below the poverty level, that are above age 18 without a high school diploma, or that are unemployed, is higher than the national average in the census tract.

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

(iv) COVID–19 death rates are at least 10 percent higher than the national average in the census tract.
(v) There is a higher than average population in the census tract of vulnerable or sensitive individuals who may be at greater risk than the general population of adverse health effects from exposure to one or more air pollutants for which national ambient air quality standards have been established pursuant to the Clean Air Act (42 U.S.C. 7401 et seq.), including infants, children, pregnant women, workers, the elderly, or individuals living in an environmental justice community.

(B) LIMITATION.—Not more than 1 of the NCore multipollutant monitoring stations described in subparagraph (A) may be sited within the same metropolitan statistical area, municipality, or county.

(2) SITING DETERMINATIONS.—In determining and approving sites for NCore multipollutant monitoring stations required under subsection (a), the Administrator shall—

(A) invite proposals from or on behalf of residents of a community for the siting of such stations in such community;
(B) prioritize siting of such stations in census tracts or counties with per capita death rates from COVID–19 that are at least 10 percent higher than the national average, as of the date of enactment of this Act or the date of the proposal; and

(C) prior to making siting determinations, provide public notice of proposed siting locations and provide an opportunity for public comment for at least 30 days thereafter—

(i) in the Federal Register, by email to persons who have requested notice of proposed siting determinations; by news release; and

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

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

(1) in coordination with the States, complete an assessment, which includes public input, on the status of all ambient air quality monitors that are part of Federal, State, or local networks and used for determining compliance with national ambient air quality standards to determine whether each such monitor is operational; and
(2) report to Congress, and publish on the public website of the Environmental Protection Agency, a list of all non-operational monitors and an accompanying schedule and plan to restore all such monitors into full operation within one year.

(f) FUNDING.—

(1) Authorization of Appropriations.—

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

(2) Uses.—The Administrator—

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

(i) directly to deploy NCore multipollutant monitoring stations required under subsection (a); or

(ii) make grants under section 105 of the Clean Air Act to State and local governments for deployment and operation of such NCore multipollutant monitoring stations; and

(B) shall use at least 5 percent, but not more than 10 percent, of amounts made available to carry out this section to perform maintenance and repairs necessary to restore to operation to currently non-operational monitors...
located in nonattainment areas for ozone or PM2.5.

SEC. 5. SENSOR MONITORING.

(a) Deployment of Air Quality Sensors.—Not later than 6 months after the date of enactment of this Act, the Administrator shall deploy at least 1,000 air quality sensors, that each cost $2,000 or less, in census tracts or counties with per capita death rates from COVID–19 that are at least 10 percent higher than the national average as of the date of enactment of this Act.

(b) Pollutants.—Each sensor deployed pursuant to subsection (a) shall measure ozone, PM2.5, or sulfur dioxide. The Administrator shall determine which pollutant or pollutants to monitor based on the pollution sources affecting the area in which the sensor is to be deployed.

(e) Priority.—The Administrator shall give priority for deployment of sensors pursuant to subsection (a) to census tracts or counties that—

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

(2) have, or are substantially impacted by, significant emissions of ozone, PM2.5, or sulfur dioxide; and
(3) are not part of an area designated as non-
attainment under the Clean Air Act for the air pol-
lutant or pollutants to be monitored.

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

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

(f) **Authorization of Appropriations.**—There is
authorized to be appropriated to carry out this section
$2,500,000.
SEC. 6. ENVIRONMENTAL HEALTH DISPARITIES RESEARCH GRANT PROGRAMS.

(a) CENTERS OF EXCELLENCE ON ENVIRONMENTAL HEALTH DISPARITIES RESEARCH GRANTS.—The Director of the National Institutes of Health, in coordination with the National Center for Environmental Research at the Environmental Protection Agency, shall carry out a Centers of Excellence on Environmental Health Disparities Research grant program. Such program shall establish and support no fewer than 10 research centers with 5 year awards to—

(1) conduct basic and applied research on environmentally driven health disparities;

(2) establish, develop, or expand collaborations with other researchers and organizations involved in environmental health disparities and affected communities;

(3) disseminate scientific knowledge to other researchers and members of affected communities;

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

(5) other activities, as determined by the Director.
(b) Authorization of Appropriations.—There are authorized to be appropriated to carry out this program $15,000,000 for each of fiscal years 2021 thru 2026.

SEC. 7. DEFINITIONS.

In this Act:

(1) Administrator.—The term “Administrator” means the Administrator of the Environmental Protection Agency.

(2) Accidental Release.—The term “accidental release” has the meaning given such term in section 112(r) of the Clean Air Act (42 U.S.C. 7412(r)).

(3) Area Source; Existing Source; Hazardous Air Pollutant; Major Source; New Source; Stationary Source.—Except as otherwise provided, the terms “area source”, “existing source”, “hazardous air pollutant”, “major source”, “new source”, and “stationary source” have the meaning given such terms in section 112(a) of the Clean Air Act (42 U.S.C. 7412(a)).

(4) COVID–19.—The term “COVID–19” means the novel coronavirus disease 2019 that is the subject of the declaration of a public health emergency by the Secretary of Health and Human Serv-
ices pursuant to section 319 of the Public Health Service Act (42 U.S.C. 247d) on January 27, 2020.

(5) METHOD 325A.—The term “Method 325A” means the Air Emission Measurement Center promulgated test method titled “Volatile Organic Compounds from Fugitive and Area Sources: Sampler Deployment and VOC Sample Collection”.

(6) METHOD 325B.—The term “Method 325B” means the Air Emission Measurement Center promulgated test method titled “Volatile Organic Compounds from Fugitive and Area Sources: Sampler Preparation and Analysis.”


(8) NCore AND SLAMS.—The terms “NCore” and “SLAMS” have the meaning given such terms in section 58.1 of title 40, Code of Federal Regulations (as in effect on the date of enactment of this Act).
(9) **Synthetic area source.**—The term “synthetic area source” has the meaning given “synthetic minor HAP source” in section 49.152 of title 40, Code of Federal Regulations (or successor regulations).