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 hazardous air pollutant monitoring at the fenceline of facilities whose emissions are linked to local health threats, to ensure the Environmental Protection Agency promulgates rules that require hazardous air pollutant data measurement and electronic submission at fencelines and stacks of 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 12, 2022

Ms. DUCKWORTH 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 hazardous air pollutant monitoring at the fenceline of facilities whose emissions are linked to local health threats, to ensure the Environmental Protection Agency promulgates rules that require hazardous air pollutant data measurement and electronic submission at fencelines and stacks of 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 Representatives 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 2022”.

SEC. 2. 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 the term in section 112(r)(2) of the Clean Air Act (42 U.S.C. 7412(r)(2)).

(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 meanings given the terms in section 112(a) of the Clean Air Act (42 U.S.C. 7412(a)).

(4) Emissions measurement system.—The term “emissions measurement system” means a set
of monitors, testing equipment, tools, and processes employed at a facility to measure emissions from direct and fugitive points at a source or facility or at the source’s or facility’s fenceline that employs Environmental Protection Agency-approved or promulgated test methods for all measured pollutants for which a method is available.

(5) Federal equivalent method; federal reference method.—The terms “Federal equivalent method” and “Federal reference method” have the meanings given to such terms in section 53.1 of title 40, Code of Federal Regulations (or to the same or substantially similar terms in successor regulations).

(6) Method 325A.—The term “Method 325A” means the most current version of the test method 325A published by the Environmental Protection Agency.

(7) Method 325B.—The term “Method 325B” means the most current version of the test method 325B published by the Environmental Protection Agency.

(8) Method TO–15A.—The term “Method TO–15A” means the most current version of the test
method TO–15 (including TO–15A) published by the Environmental Protection Agency.

(9) NATIONAL AMBIENT AIR QUALITY STAND-ARD.—The term “national ambient air quality standard” means a national ambient air quality standard established under section 109 of the Clean Air Act (42 U.S.C. 7409).

(10) NCore; SLAMS.—The terms “NCore” and “SLAMS” have the meaning given those terms in section 58.1 of title 40, Code of Federal Regulations (as in effect on the date of enactment of this Act).

(11) REAL-TIME.—The term “real-time” means the actual or near actual time during which pollutant levels occur at or near the property boundary of a facility or in a nearby community.

(12) SOURCE.—The term “source” means a source as such term is used in the Clean Air Act (42 U.S.C. 7401 et seq.).

SEC. 3. HEALTH EMERGENCY AIR TOXICS MONITORING NETWORK.

(a) MONITORING.—

(1) IN GENERAL.—

(A) PROGRAM.—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 sections 103 and 114 of that Act (42 U.S.C. 7403, 7414), emissions measurement and quantification, including the best available form of fenceline monitoring of stationary sources of hazardous air pollutants that are on the list developed under subsection (c), including through expansion of the National Air Toxics Trends Station network or through creating a new network, as appropriate.

(B) TIMING.—The Administrator shall begin implementation of the program under subparagraph (A) not later than 18 months after the date of enactment of this Act.

(2) MONITORING PERIOD.—

(A) IN GENERAL.—The Administrator shall maintain the monitoring required under paragraph (1) for a period of not less than 6 years after the date on which the monitoring required under that paragraph is first carried out.

(B) SUBSEQUENT MONITORING.—After the 6-year period described in subparagraph (A), the Administrator shall maintain the emissions measurement and quantification program under
paragraph (1), consistent with this section, through—

(i) maintaining monitors at all or some sources under the program under paragraph (1); and

(ii) adding or moving monitors under the program under paragraph (1) to additional sources, following the process for substitution of sources in subsection (g).

(C) SHORTENED PERIOD.—If the Administrator determines that 6 years of monitoring, as required by subparagraph (A), is not necessary to protect public health or assure compliance at the source or the facility involved, the Administrator may decrease or end the monitoring after at least 3 years of monitoring has occurred.

(D) ADDITIONAL INSPECTIONS AND TESTING.—In addition to fenceline monitoring under the program under this subsection, the Administrator shall use the Administrator’s full authority to inspect and require emission testing at sources at or inside the facility involved to the extent necessary to identify and address the emissions crossing the fenceline.

(b) PUBLICATION OF RESULTS.—
(1) IN GENERAL.—The Administrator shall publish and maintain the plans for and the results of all measurements, including fenceline monitoring, conducted under the program under subsection (a)(1) on the website of the Environmental Protection Agency—

(A) in a highly accessible format;

(B) in multiple languages; and

(C) for a period of at least 6 years.

(2) IMMEDIATE AVAILABILITY.—The Administrator shall ensure that the monitoring data described in paragraph (1) is made publicly available under that paragraph as expeditiously as practicable, and not later than 7 days after electronic submission, which shall be not later than one month after the date of collection of such data.

(c) LIST OF SOURCES.—

(1) DEVELOPMENT.—

(A) IN GENERAL.—Not later than 270 days after the date of enactment of this Act, the Administrator shall publish, after public notice and comment, a list of stationary sources of hazardous air pollutants that, subject to subparagraph (B), includes—

(i) at least 45 of the sources listed—
(I) as high-priority facilities in Appendix A of the report of the Office of Inspector General of the Environmental Protection Agency numbered 20–N–0128 and dated March 31, 2020; or

(II) as contributing to high cancer risk at the census block level in Appendix C of the report of the Office of Inspector General of the Environmental Protection Agency numbered 21–P–0129 and dated May 6, 2021; and

(ii) at least 55 other major sources or area sources that meet the criteria described in paragraph (2).

(B) SUBSTITUTION.—

(i) IN GENERAL.—If the Administrator determines that a source described in subparagraph (A)(i) no longer contributes to high health risks or impacts, the Administrator shall—

(I) cease to include that source in the list under subparagraph (A); and
(II) include instead an additional major source or area source described in subparagraph (A)(ii) to ensure that the list under subparagraph (A) includes not less than 100 high-priority sources.

(ii) Description of Reasons.—The Administrator shall publish in the Federal Register—

(I) any determination to make a substitution under clause (i); and

(II) an explanation of the reasons for any such determination demonstrating, based on monitoring data or other reliable information, that the substitution is likely to ensure that monitoring under this section occurs at the sources causing or contributing to the highest potential health risks or other impacts from hazardous air pollution.

(iii) Requirement.—The Administrator may include an additional major source or area source under clause (i)(II) only if the Administrator determines that
the source is, or is likely to be, contributing local health risks or impacts that are equivalent to, or greater than, those of the source for which the new source is being substituted.

(2) CRITERIA.—The Administrator may include a major source or area source described in clause (ii) of paragraph (1)(A) on the list described in that paragraph only if the source—

(A) emits at least 1 of the pollutants described 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-1,000,000; or

(II) a chronic non-cancer hazard index that is greater than 1; or

(ii) in a source category with—

(I) a cancer risk that is at least 50-in-1,000,000 for the individual most exposed to emissions from the source category;
(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)(i) is classified in 1 or more of North American Industry Classification System codes 322, 324, 325, 326, 331, 332, 339, 424, and 562;

(ii)(I) is 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

(II) has had an accidental release required to be reported during the previous 5-year period pursuant to sections 68.42 and 68.195 of title 40, Code of Federal Regulations (as in effect on the date of enactment of this Act); or

(iii) is determined by the Administrator to be a high-priority source or facility for emissions measurement because the emissions of the source or facility are causing or contributing to, or have the potential to cause or contribute to, serious health risks or impacts.
(3) POLLUTANTS.—The pollutants described in this paragraph are—

(A) ethylene oxide, CAS 75218;
(B) chloroprene, CAS 126998;
(C) benzene, CAS 71432;
(D) 1,3-butadiene, CAS 106990;
(E) formaldehyde, CAS 50000;
(F) acetaldehyde, CAS 75070;
(G) lead compounds;
(H) arsenic compounds;
(I) cadmium compounds;
(J) nickel compounds;
(K) manganese compounds;
(L) any other hazardous air pollutant included in the list described in section 112(b) of the Clean Air Act (42 U.S.C. 7412(b)) that the Administrator determines, after public notice and comment, the emissions of which—

(i) are, or may be contributing to, serious health risks; and
(ii) warrant emissions quantification and measurement; and
(M) any pollutant that is a precursor to atmospheric photochemical production of any other pollutant on such list.
(4) Use of Risk Assessments.—In carrying out this subsection, the Administrator shall—

(A) use—

(i) the Environmental Protection Agency’s latest evaluations and methods of compiling and evaluating information about risks from air toxics, or the most recent Air Toxics Screening Assessment or other current evaluation or report by the Environmental Protection Agency providing similar information about cancer and noncancer risks from hazardous air pollution based on measured or modeled emissions;

(ii) the Risk-Screening Environmental Indicators model of the Administrator;

(iii) a prior health risk assessment that was performed by the Administrator for the applicable source or source category; or

(iv) a new health risk assessment performed by the Administrator that—

(I) follows the best available science (including the most recent
guidance from the National Academy of Sciences); and

(II) considers, to the greatest extent practicable, with respect to the applicable source or facility—

(aa) cumulative risks and impacts;

(bb) increased vulnerability that results from socioeconomic disparities;

(cc) multiple source exposure; and

(dd) exposure in utero, in childhood, and through the age of 85; and

(B) consider—

(i) the most recent emission tests available to the Administrator or received by the Environmental Protection Agency in public comment; and

(ii) any fenceline or ambient monitoring data for which an Environmental Protection Agency-approved data quality check has been performed.

(d) METHODS AND TECHNOLOGIES.—
(1) In general.—Except as provided in paragraph (3), in carrying out the program under subsection (a), the Administrator shall, for each stationary source on the list published under subsection (c)(1), employ an emissions measurement system to monitor the pollutants described in subsection (c)(3) emitted by the stationary source, including at least—

(A) the most current Environmental Protection Agency-approved or promulgated emission test or monitoring method, including Methods 325A, 325B, and TO–15 or the most current and best available version of such methods approved or promulgated by the Environmental Protection Agency; or

(B) for each stationary source described in paragraph (2), the best available method for continuous, real-time measurement of air pollutant concentrations.

(2) Stationary sources described.—A stationary source referred to in paragraph (1)(B) is—

(A) not less than each of the 20 stationary sources on the list published under subsection (c)(1) that—
(i) emits the greatest volume of pollutants described in subsection (c)(3); or

(ii) causes the greatest health risk, based on the emissions of the pollutants described in subsection (c)(3) individually, as a group, or cumulatively, based on—

(I)(aa) the Environmental Protection Agency's latest evaluations and methods of compiling and evaluating information about risks from air toxics, or the most recent Air Toxics Screening Assessment or other current evaluation or report by the Environmental Protection Agency providing similar information about cancer and noncancer risks from hazardous air pollution based on measured or modeled emissions;

(bb) the Risk-Screening Environmental Indicators model of the Administrator;

(cc) a prior health risk assessment that was performed by the Administrator for the applicable source or source category; or
(dd) a new health risk assessment performed by the Administrator that—

(AA) follows the best available science (including the most recent guidance from the National Academy of Sciences); and

(BB) considers, to the greatest extent practicable, with respect to the applicable source or facility, cumulative risks and impacts, increased vulnerability that results from socioeconomic disparities, multiple source exposure, and exposure in utero, in childhood, and through the age of 85; and

(II) the most recent emission tests available to the Environmental Protection Agency or received in public comment, and any fenceline or ambient monitoring data for which an Environmental Protection Agency-approved data quality check has been performed; and
(B) any other stationary source on the list published under subsection (e)(1) that is regulated under section 112(r)(7) of the Clean Air Act (42 U.S.C. 7412(r)(7)) and has had an accidental release or incident that is required to be reported during the previous 5-year period under such section 112(r)(7) (42 U.S.C. 7412(r)(7)); and

(C) any other stationary source on the list published under subsection (c)(1) for which application of the methods described in subparagraph (A) alone will not be sufficient to monitor and report the pollutants described in subsection (c)(3) that are emitted by that stationary source.

(3) UPDATES.—

(A) APPROVED OR PROMULGATED METHODS.—The Administrator shall—

(i) not later than 270 days after the date of enactment of this Act, review and, after public notice and comment, update each approved or promulgated test method described in this section to add as many of the pollutants described in subsection (c)(3) as possible; and
(ii) otherwise strengthen the test methods described in clause (i) to support effective hazardous air pollutant measurement and the full implementation of this Act.

(B) NEW TEST METHODS.—

(i) IN GENERAL.—Not later than 18 months after the date of enactment of this Act, the Administrator shall approve or promulgate, as applicable, any new test methods that are necessary to ensure effective fenceline monitoring of all pollutants and sources described in this section, including—

(I) at least 1 method that represents the best and most accurate form of continuous, real-time fenceline monitoring; and

(II) at least 1 method that represents the best and most accurate form of multimetal monitoring.

(ii) UPDATES REQUIRED.—Not less frequently than once every 10 years, the Administrator shall review and, if necessary, after public notice and comment,
strengthen or add new test methods that meet the requirements under clause (i), which shall be based on—

(I) the best available monitoring technologies; and

(II) the advice of staff of the Environmental Protection Agency responsible for enforcement of this Act and other monitoring experts.

(c) MONITOR PLACEMENT AND MAINTENANCE.—

(1) IN GENERAL.—The Administrator shall, after public notice and comment, place and maintain, or ensure placement and regular maintenance of, all monitors required under this section to ensure effective and reliable emissions measurement pursuant to this section.

(2) MAINTENANCE CHECK.—The maintenance required under paragraph (1) shall include a maintenance check of the monitor not less frequently than once every 180 days, unless—

(A) the test method used by the monitor requires a maintenance check more frequently; or

(B) a maintenance check is requested by a member of the public.
(3) **PUBLIC INPUT.**—The Administrator shall, after public notice and comment, create a process for the public—

(A) to track the maintenance of monitors under this subsection; and

(B) request a maintenance check of a monitor.

(f) **REPORT.**—Not later than 6 years after the date of enactment of this Act, and not less frequently than every 6 years thereafter, the Administrator shall submit to the Congress and post publicly on the website of the Environmental Protection Agency a report describing the results of the program carried out under subsection (a), which shall include—

(1) the results of emissions measurement implemented under that program;

(2) any actions of the Administrator taken based on that emissions measurement data or program; and

(3) whether the Administrator proposes—

(A) to continue emissions measurements at any or all of the stationary sources on the list published under subsection (e)(1); or
(B) to implement emissions measurements
of any additional stationary sources as deter-
mined under subsection (g).

(g) DETERMINATION REGARDING ADDITIONAL
SOURCES.—Not later than 6 years after the date of enact-
ment of this Act, and not less frequently than every 6
years thereafter, the Administrator shall—

(1) after public notice and comment, make a
determination of whether to add or remove sources
to the list published under subsection (c)(1)—

(A) to ensure compliance of such sta-
tionary sources with existing emission stand-
ards under section 112 of the Clean Air Act (42
U.S.C. 7412);

(B) to prevent and detect accidental re-
leases;

(C) to protect the health of the commu-
nities most exposed to the emissions of haz-
ardous air pollutants from such stationary
sources to the greatest extent possible; or

(D) to ensure the 100 highest-priority
sources or facilities, based on the best available
science and the most current data on health
risks and impacts, have emissions measurement
systems in place for pollutants required to be monitored under this section; and

(2) publish a determination under paragraph (1) in the Federal Register.

(h) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $146,000,000 for the period of fiscal years 2023 and 2024.

SEC. 4. COMMUNITY AIR TOXICS MONITORING.

(a) REGULATIONS.—Not later than 2 years after the date of enactment of this Act, the Administrator shall promulgate regulations pursuant to authority provided by the Clean Air Act, which may include subsections (d), (f), and (r) of section 112, section 113, and section 114 of the Clean Air Act (42 U.S.C. 7412, 7413, 7414), for each source category described in subsection (b), that—

(1) require all sources in the source category to implement, not later than 1 year after the promulgation of the regulations, the best available form of emissions measurement, including continuous emissions monitoring and fenceline monitoring, to ensure compliance with the emission standards for hazardous air pollutants;

(2) for facilities in the source category that are required to submit risk management plans under
section 112(r)(7) of that Act (42 U.S.C. 7412(r)(7)), require each facility to implement—

(A) continuous, real-time monitoring to provide for effective emergency response and provide information to prevent future releases;

and

(B) emissions measurement, including fenceline monitoring, to provide for effective emergency response and provide information to prevent future releases;

(3) subject to subsection (e), 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;

(4) if any applicable corrective action level under paragraph (3) is exceeded, require—

(A) a root cause analysis;

(B) full remedial action to resolve the exceedance and protect the most exposed or most vulnerable individuals potentially affected by the exceedance; and

(C) a public report that a violation of the Clean Air Act (42 U.S.C. 7401 et seq.) has occurred; and
(5) treat any requirement imposed by the regulations under this section as a requirement under section 112 of the Clean Air Act (42 U.S.C. 7412) that is enforceable under section 113 of such Act (42 U.S.C. 7413).

(b) SOURCE CATEGORIES.—The source categories described in this subsection shall include—

(1) each category or subcategory of major sources or area sources that—

(A) contains—

(i) at least 1 of the stationary sources of hazardous air pollutants that are on the list published under section 3(e);

(ii) major sources or area sources identified in the most recent National Emissions Inventory of the Environmental Protection Agency as emitting a pollutant described in section 3(e)(3);

(iii) petroleum, chemical, petrochemical, or plastics manufacturing sources, marine vessel loading operations, or other sources that are classified in 1 or more of North American Industry Classification System codes 322, 324, 325, 326, 331, 332, 339, 424, and 562; or
(iv) any other major source 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 (or is likely within the 2-year period beginning on the date of enactment of this Act to become subject to such an obligation or action) to review and determine whether to revise the emissions standards that apply to that major source; or

(B) contains any stationary source that—

(i) is regulated under section 112(r)(7) of the Clean Air Act (42 U.S.C. 7412(r)(7)); and

(ii) has had an accidental release or incident that is required to be reported during the previous 5-year period under such section 112(r) (42 U.S.C. 7412(r)) and the regulations thereunder; and

(2) any other source category for which the Administrator determines that requiring fenceline monitoring would benefit public health or welfare.
(c) Determination of Best Available Form of Monitoring.—

(1) In general.—The Administrator, in consultation with the Office of Air and Radiation, the Office of Enforcement and Compliance Assurance, the Office of Environmental Justice, and the Office of Research and Development, shall, for purposes of the regulations promulgated pursuant to subsection (a)—

(A) determine the best available form of emissions measurement, including continuous emissions monitoring and fenceline monitoring; and

(B) ensure the methods required under the regulations are at least as stringent as the most current Environmental Protection Agency-approved or promulgated emission test or monitoring method, including Methods 325A, 325B, and TO–15 (or the most current and best available version of such methods approved or promulgated by the Environmental Protection Agency).

(2) Requirement.—In carrying out paragraph (1)(B), the Administrator shall ensure that 1 or more of the methods described in or promulgated
under section 3 or subsection (d) (including multimetal monitoring) is included in the regulations promulgated pursuant to subsection (a) if that method is the best available method for 1 or more of the pollutants for which monitoring is required under this section.

(d) METHODS AND TECHNOLOGIES.—

(1) IN GENERAL.—For all stationary sources in the source categories described in subsection (b), as the best available fenceline monitoring method for those source categories, the Administrator may, in the regulations promulgated pursuant to subsection (a)—

(A) require application, implementation, or employment of optical remote sensing technology to provide real-time measurements of air pollutant concentrations along an open-path; or

(B) provide an explanation of why application, implementation, or employment of 1 or more of the technologies described in subparagraph (A) is not necessary—

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

(ii) to protect the public health, to prevent accidental releases, or to provide for effective emergency response.

(2) Multiple-source or facility complexes.—

(A) Definition of multiple-source or facility complex.—In this paragraph, the term “multiple-source or facility complex” means 1 or more stationary sources co-located at the same site.

(B) Multiple-source or facility complex monitoring.—In the regulations promulgated pursuant to subsection (a), the Administrator shall ensure that the best available form of monitoring for a multiple-source or facility complex that contains not less than 2 stationary sources in 1 or more of North American Industry Classification System codes 324, 325, and 326, or a related chemical or petrochemical sector, may be at least a combination of—

(i) real-time, open-path monitoring; and

(ii) Method 325A and Method 325B.
(C) Requirement.—In carrying out subparagraph (B), the Administrator may consider whether any other multiple-source or facility complexes should be required to employ the combined monitoring methods described in that subparagraph.

(e) Precautionary Approach.—In promulgating the corrective action level for each of the hazardous air pollutants described in subsection (a)(3), the Administrator shall—

(1) consider the best available science;

(2) take a precautionary approach to ensure that the owner or operator of the source or facility reduces the emissions of the source or facility to prevent harm if the measured concentration at the fenceline would, or is likely to—

(A) increase harm to public health or safety (including through an increased health risk); or

(B) reach a level that may result in short-term, long-term, or chronic human exposure to air pollution (including any fetal exposure that begins in utero) that increases the risk of—
(i) health harms resulting from odors,

irritation, sensitizing effects, or any combi-

nation of those harms;

(ii) disease (including cancer and

other illnesses); or

(iii) death; and

(3) take into account the aggregate and cumu-

lative emissions and health risks from the facility,

including multiple source categories, as applicable, to

ensure full health protection from the entire facility.

(f) MAINTENANCE AND PUBLIC REPORTING.—

(1) IN GENERAL.—In the regulations promul-

gated under subsection (a), the Administrator shall

ensure that—

(A) the owners or operators of sources sub-

ject to the requirements of this section—

(i) perform regular inspections and

maintenance of all measured equipment re-

quired under this section; and

(ii) submit regular reports to the Ad-

ministrator that—

(I) include the measured emis-

sions data collected by that emissions

measurement equipment;
(II) describe the status of that measurement equipment; and

(III) contain a detailed explanation of the circumstances surrounding a delay in collecting or missing data;

(B) the emissions measurement system required under this section is continuous and yields reliable data not less than 95 percent of the time, without any regulatory exemption or extension; and

(C) any problem with the fenceline monitoring equipment required under this section is repaired within 2 days of discovering the problem.

(2) VIOLATION.—In the regulations promulgated under subsection (a), the Administrator shall—

(A) require the owner or operator of a stationary source subject to such regulations to report, with respect to such source, at least semi-annually—

(i) all exceedances of any corrective action level; and
(ii) all corrective action planned and taken; and

(B) for purposes of imposing penalties, treat each day on which a violation of a reporting requirement under subparagraph (A) continues as a separate violation.

(3) Public reporting.—

(A) In general.—The Administrator shall make available on the website of the Environmental Protection Agency, in an accessible format that includes multiple languages—

(i) all emissions measurement plans and reports required under this section;

(ii) all emissions measurement data collected by monitoring equipment required under this section; and

(iii) an option to sign up for community-wide or source-specific alerts that alert the user if the emissions concentrations measured pursuant to clause (i) or (ii), as applicable, exceed—

(I) a health reference level of the Administrator;

(II) a health reference level approved by the Administrator; or
(III) the applicable corrective ac-
tion level under subsection (a)(3).

(B) PUBLIC NOTICE AND COMMENT.—The
Administrator shall provide notice and receive
public comment on the format and accessibility
of the information required under subparagraph
(A).

(C) PUBLICATION.—The Administrator
shall publicize the information required under
subparagraph (A) in each community that con-
tains a source regulated under this section
through not less than 2 of the most widely
viewed local media formats for members of that
community that live nearest the regulated
source.

(g) AUTHORIZATION OF APPROPRIATIONS.—There is
authorized to be appropriated to carry out this section
$50,000,000 for the period of fiscal years 2023 and 2024.

SEC. 5. NAAQS MONITORING NETWORK.

(a) DEPLOYMENT OF NCore MULTIPOLLUTANT
MONITORING STATIONS.—The Administrator shall re-
quire the deployment of 80 additional NCore multipollut-
ant monitoring stations.

(b) DEADLINE.—Not later than 3 years after the
date of enactment of this Act, the Administrator shall en-
sure that all NCORE multipollutant monitoring stations re-
required to be deployed under subsection (a) are—

(1) installed and integrated into the air quality
monitoring system established pursuant to sections
110(a)(2)(B) and 319 of the Clean Air Act (42
U.S.C. 7410(a)(2)(B), 7619); and

(2) after installation, operated and maintained
on a continuing basis.

(e) MONITORING RESULTS.—Monitoring results from
NCORE multipollutant stations deployed pursuant to sub-
section (a) shall be used for—

(1) assessments of the compliance of areas with
national ambient air quality standards;

(2) integrated science assessments in reviews of
national ambient air quality standards promulgated
under section 109 of the Clean Air Act (42 U.S.C.
7409);

(3) evaluating disparities of pollution exposures
within metropolitan areas; and

(4) such other purposes as the Administrator
determines will promote the protection of public
health from air pollution.

(d) LOCATIONS.—

(1) VULNERABLE POPULATIONS.—The Admin-
istrator shall ensure that not less than 40 of the
NCore multipollutant monitoring stations required under subsection (a)—

(A) are not limited to metropolitan statistical areas with populations of 50,000 or greater; and

(B) are sited in census tracts that each meet 1 or more of the following criteria, with the specific site selected consistent with Appendix D to part 58 of title 40, Code of Federal Regulations (as in effect on the date of enactment of this Act):

(i) The rates of childhood asthma, adult asthma, chronic obstructive pulmonary disease, heart disease, or cancer are at least 5 percent higher than the national average for that 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 of the Clean Air Act (42 U.S.C. 7661)) are located within the
census tract or adjacent census tracts combined.

(iv) There is a higher-than-national-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 1 or more air pollutants for which national ambient air quality standards have been established pursuant to section 109 of the Clean Air Act (42 U.S.C. 7409).

(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 any community for the siting of the stations in that community, which may include inviting proposals through regional or virtual meetings;

(B) prioritize siting of the stations in census tracts or counties that the Administrator determines should be prioritized for siting based on—
(i) the potential for the levels of 1 or more air pollutants to be monitored by the stations to reach or exceed the level of the applicable national ambient air quality standard established pursuant to section 109 of the Clean Air Act (42 U.S.C. 7409);

(ii) the number of people who live, work, or recreate in the area or areas for which monitoring by the stations is reasonably anticipated to be representative with respect to air quality and the proportion of those people who are at higher risk than the general population of adverse health effects from the air pollutants monitored;

(iii) the lack or inadequacy of existing air quality monitors for providing representative air quality data for the affected area or areas for the pollutants to be measured by the station; and

(iv) the current designation of the area in which the monitoring station would be located as unclassifiable or in attainment for 1 or more of the pollutants to be monitored by that station; and
(C) prior to making siting determinations—

(i) provide public notice of proposed siting locations—

(I) in the Federal Register;

(II) by email to persons who have requested notice of proposed siting determinations;

(III) by news release; and

(IV) by posting on the public website of the Environmental Protection Agency; and

(ii) provide an opportunity for public comment for not less than 30 days after the date of publication of the notice required under clause (i) in the Federal Register.

(3) RELIANCE ON HYBRID METHODS.—In determining under paragraph (2)(B)(i) the potential for an air pollutant to reach or exceed the level of the applicable standard, the Administrator may rely on hybrid methods that combine information from multiple sources, including monitors, sensors, modeling, and satellites.

(e) ADDITIONAL AMBIENT MONITORS.—
(1) IN GENERAL.—The Administrator shall deploy not fewer than 100 Federal reference method monitors or Federal equivalent method monitors for 1 or more air pollutants for which national ambient air quality standards have been established pursuant to section 109 of the Clean Air Act (42 U.S.C. 7409) in areas—

(A) that are unmonitored or undermonitored, as determined by the Administrator; and

(B) within which the Administrator determines, after public notice and comment, that adding those monitors is warranted—

(i) to detect whether the area is in nonattainment of the applicable national ambient air quality standards; and

(ii) to improve the publicly available data on air quality for 1 or more of those air pollutants (or precursors to those air pollutants).

(2) SITING DETERMINATIONS.—In approving sites for new Federal reference method monitors or Federal equivalent method monitors required under this subsection, the Administrator shall prioritize siting of the stations in census tracts or counties in accordance with subsection (d)(2)(B).
(3) Relation to previously deployed or planned monitors.—The Federal reference method monitors required under this subsection shall be in addition to, and not in lieu of, any monitors already deployed or planned for deployment by the Administrator, any State, any other governmental entity, or any other entity prior to the date of enactment of this Act.

(f) Report.—Not later than 2 years 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; and

(2) submit to Congress and make available on the public website of the Environmental Protection Agency a report that includes—

(A) a list of all monitors identified under paragraph (1); and

(B) a schedule and plan to restore or replace all monitors included in the list under subparagraph (A) to full operation not later than 16 months of the date of enactment of

...
this Act, except that the schedule and plan shall not apply to monitors—

   (i) that have been discontinued in accordance with section 58.14(c) of title 40, Code of Federal Regulations (as in effect on the date of enactment of this Act); and

   (ii)(I) for which such discontinuation is not subject to a judicial challenge; or

   (II) for which a judicial challenge described in subclause (I) has been fully resolved by a settlement or order that authorizes discontinuation of such monitor.

(g) DESIGNATIONS.—Not later than 2 years after the date on which data is received from a monitor sited pursuant to this section that demonstrates that an area that is designated pursuant to section 107(d)(1) of the Clean Air Act (42 U.S.C. 7407(d)(1)) by the Administrator as in attainment or unclassifiable for an air pollutant is in violation of the applicable national ambient air quality standard, the Administrator shall redesignate pursuant to section 107(d)(3) of such Act (42 U.S.C. 7407(d)(3)) that area as in nonattainment for that pollutant unless the designation is otherwise precluded under this Act.

(h) SATELLITE MONITORING.—

   (1) SATELLITE monitoring data.—
(A) Provision of Satellite Data.—The Administrator may consult with the Administrator of the National Aeronautics and Space Administration regarding data from the satellites of the National Aeronautics and Space Administration for use in calculating design values under any national ambient air quality standards for PM$_{10}$ and PM$_{2.5}$.

(B) Regulations Required.—The Administrator may promulgate regulations to specify procedures (including any modeling techniques) for using data described in subparagraph (A) in combination with information from multiple sources, including monitors and modeling, to calculate the expected number of exceedances per year and the design values for PM$_{10}$ and PM$_{2.5}$ for purposes of determining compliance or noncompliance with the national ambient air quality standards for those pollutants.

(2) National Academy of Sciences Report.—

(A) In General.—The Administrator may enter into an arrangement with the National Academy of Sciences under which the National
Academy of Sciences agrees to submit a report that describes the actions necessary, including new science and satellite assets to enable the contribution of satellite monitoring to the calculation of design values and nonattainment determinations under any national ambient air quality standards for ozone, oxides of nitrogen, and oxides of sulfur established pursuant to section 109 of the Clean Air Act (42 U.S.C. 7409).

(B) REGULATIONS REQUIRED.—

(i) IN GENERAL.—Not later than December 31, 2023, the Administrator, in coordination with the Administrator of the National Aeronautics and Space Administration and the Administrator of the National Oceanic and Atmospheric Administration, shall promulgate regulations that provide a plan for the use of satellite monitoring data in calculating design values for the pollutants described in subparagraph (A).

(ii) REQUIREMENT.—Not later than January 1, 2027, the Administrator shall implement the plan required by clause (i)
and provide for use of satellite data in calculating design values for the pollutants described in subparagraph (A).

(3) DEFINITION.—For purposes of this subsection, the term “design value” means, for each pollutant, the air quality statistic the Administrator defines in part 50 (including appendices) of title 40, Code of Federal Regulations, for comparison with the relevant national ambient air quality standard established under section 109 of the Clean Air Act (42 U.S.C. 7409), regardless of whether the regulation (including appendices) in part 50 of title 40, Code of Federal Regulations, uses the term “design value”.

(i) MONITORING PLANS.—Notwithstanding any other provision of law, the Administrator may not approve a State monitoring plan under section 58.10 of title 40, Code of Federal Regulations (or successor regulations), unless—

(1) the State provided, with respect to the State monitoring plan—

(A) public notice;

(B) not less than 45 days for public comment; and

(C) an opportunity for public hearing; and
(2) the Administrator—

(A) proposes in the Federal Register to approve or disapprove of the State monitoring plan;

(B) provides not less than 45 days for public comment on the proposal described in subparagraph (A); and

(C) publishes in the Federal Register the final action on the proposal described in subparagraph (A).

(j) FUNDING.—

(1) AUTHORIZATION OF APPROPRIATIONS.—

There is authorized to be appropriated to carry out this section $75,000,000 for fiscal year 2023.

(2) USES.—The Administrator—

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

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

(ii) to make grants under section 103 or 105 of the Clean Air Act (42 U.S.C. 7403, 7405) to State and local governments for deployment and operation of the
SEC. 6. SENSOR MONITORING.

(a) DEPLOYMENT OF AIR QUALITY SENSORS.—

(1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Administrator—

(A) shall deploy, in accordance with the prioritization criteria described in section 5(d)(2), not fewer than 1,000 air quality sensors, each of which shall cost not more than $5,000;
(B) shall deploy such air quality sensors in clusters of not fewer than 5 in each of the census tracts or counties selected;

(C) before determining and approving sites for such air quality sensors, shall invite, through public notice and other means designed to reach communities disproportionately impacted by air pollution, proposals from or on behalf of residents of any community for the sites; and

(D) may contract with State and local air pollution control agencies to conduct sensor monitoring and report the results.

(2) REQUIREMENT.—In carrying out paragraph (1), the Administrator shall select sensors for deployment that—

(A) are available on the market at the time of purchase;

(B) the Administrator determines will provide data of sufficient accuracy to provide a reasonable basis for determining whether the location in which the sensor is sited is or may be at risk of exceeding the applicable national ambient air quality standard established pursuant
to section 109 of the Clean Air Act (42 U.S.C. 7409); and

(C) are the lowest cost available that meet the criteria of subparagraph (B).

(3) Exception to Cost Limitation.—Notwithstanding paragraph (1), if the Administrator determines in writing that a sensor model to measure a particular pollutant is not available on the market at a price at or below $5,000 each, the Administrator may spend an amount above $5,000 to acquire such sensor model so long as the Administrator complies with subparagraphs (B) and (C) of paragraph (2).

(b) Pollutants.—

(1) In General.—Each air quality sensor deployed pursuant to subsection (a) shall measure ozone, PM$_{2.5}$, oxides of nitrogen, or sulfur dioxide.

(2) Determination.—The Administrator shall determine which pollutant or air pollutants an air quality sensor deployed pursuant to subsection (a) shall monitor based on the pollution sources affecting the area in which the sensor is to be deployed.

(e) Determination and Installation.—

(1) In General.—Not later than 18 months after the date on which an air quality sensor de-
ployed pursuant to subsection (a) has been monitoring air quality data for 1 year, the Administrator shall determine whether data from the air quality sensors deployed in the applicable census tract or county shows air pollution levels over the 1-year period ending on the date of the determination that reached 98 percent of the level of the national ambient air quality standard under section 109 of the Clean Air Act (42 U.S.C. 7409) for any air pollutant.

(2) REQUIREMENT.—If the Administrator makes a determination under paragraph (1) that an air pollutant described in subsection (b)(1) met the threshold described in that paragraph, the Administrator shall, not later 180 days after the date of the determination, ensure that Federal reference method monitors or Federal equivalent method monitors are installed and in operation within that census tract or county for each pollutant that met the threshold.

(3) EXCEPTIONS.—The Administrator shall waive the requirement of paragraph (2) if the Administrator finds, within the 180-day period described in such paragraph, and after providing notice and an opportunity for public comment, that based on clear and convincing evidence—
(A) the measurements from the sensor or sensors supporting the determination described in paragraph (2) were so inaccurate as to provide no reasonable basis for finding that levels of the relevant pollutant reached 98 percent of the level of the national ambient air quality standard under section 109 of the Clean Air Act (42 U.S.C. 7409) for the relevant pollutant; or

(B) complementary data, such as information on the ambient matric, meteorology, measurements from other nearby sensors or ambient monitors, modeling, satellite data, or other relevant and reliable information, demonstrate that levels of the relevant pollutant could not have plausibly reached 98 percent of the level of such standard.

(d) REPORT.—Not later than 1 year after the date of enactment of this Act, and not less frequently than every 6 years thereafter, the Administrator shall report on additional areas of decision-making where data from low-cost air quality sensors may be relevant and useful.

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $6,000,000.
SEC. 7. DATA REQUIREMENT.

To the extent practicable, the Administrator shall integrate the data collected through the programs established under this Act into the EJSCREEN mapping tool of the Environmental Protection Agency or a relevant, similar mapping and screening tool.