H. R. 4656

To direct the Administrator of the Environmental Protection Agency to seek to enter an agreement with the National Academies of Sciences, Engineering, and Medicine to conduct a study on the science of background ozone in the United States and to provide research recommendations to better understand background ozone contributions to ground-level ozone, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

October 11, 2019

Mr. McAdams (for himself and Mr. Rooney of Florida) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

To direct the Administrator of the Environmental Protection Agency to seek to enter an agreement with the National Academies of Sciences, Engineering, and Medicine to conduct a study on the science of background ozone in the United States and to provide research recommendations to better understand background ozone contributions to ground-level ozone, 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,
SECTION 1. SHORT TITLE.

This Act may be cited as the “Background Ozone Research Act”.

SEC. 2. FINDINGS.

Congress finds the following:

(1) Ground-level ozone, a type of tropospheric ozone, is created when nitrogen oxides (NOX) and volatile organic compounds (VOCs), emitted by motor vehicles, power plants, other industrial processes, or natural processes like wildfires, chemically react in the presence of ultraviolet (UV) radiation from the Sun.

(2) Ground-level ozone present in a given area may be attributed to either local, human produced sources or sources that are not local and human produced.

(3) United States background ozone (hereafter referred to as “background ozone”) is the ground-level ozone that would exist in the absence of any human-produced emissions inside the United States.

(4) Ground level ozone is considered a harmful pollutant due to its effects on people and the environment and is the main component of smog.

(5) The American Thoracic Society estimated the annual excess mortality due to ground-level
ozone in the United States at 3,880 individuals as of 2017.

(6) Ground-level ozone has been linked to plant damages and thus diminished crop yields.

(7) A number of cities and regions in the United States remain out of compliance with Environmental Protection Agency (EPA) National Ambient Air Quality Standards (NAAQS) for ground-level ozone.

(8) Further research would help to understand background ozone trends and how to mitigate background ozone.

SEC. 3. STUDY ON BACKGROUND OZONE RESEARCH NEEDS.

(a) IN GENERAL.—Not later than 60 days after the date of enactment of this Act, the Administrator of the Environmental Protection Agency shall seek to enter an agreement with the National Academies of Sciences, Engineering, and Medicine (referred to in this Act as the “National Academies”) under which the National Academies shall conduct a study on the current and future research needs regarding background ozone. The study shall—

(1) propose a framework of standard terms and definitions for types of non-local ground level ozone, including types of background ozone, to standardize research on ground-level ozone;
(2) examine the current understanding of background sources of ozone and the contribution of such sources to ground-level ozone in the United States to identify gaps in knowledge that need to be addressed with additional research;

(3) examine challenges in quantifying the sources of background ozone and the contributions of each such source to ground-level ozone on a regional scale in the United States and identifies specific research needs to address these challenges;

(4) include an outline of a plan for a research and development program, including specifications for costs, timeframes, and responsible agencies, to support analysis and demonstration of background ozone trends, including by—

(A) improving collection and observational infrastructure;

(B) improving confidence in model outputs;

(C) reducing uncertainties in estimates of background ozone; and

(D) making background ozone research outputs more useful and accessible to decision-makers; and

(5) identify opportunities for international engagement that may facilitate increased research col-
laborations that improve understanding of ozone
trends.

(b) REPORT.—As a condition of any agreement under
subsection (a), the Administrator shall require that the
National Academies transmit to Congress a report on the
results of the study under subsection (a) not later than
24 months after the date of enactment of this Act.