

April 4, 2022

Via Federal eRulemaking Portal

Bryan Manning,
Office of Transportation and Air Quality,
Assessment and Standards Division (ASD),
Environmental Protection Agency,
2000 Traverwood Drive,
Ann Arbor, MI 48105

Re: [Docket No.: EPA-HQ-OAR-2019-06600; FRL-7559-01-OAR]

Request to Withdraw and Replace the Proposed Rule for Particulate Matter Standards and Test Procedures for Airplane Engines

Dear Mr. Manning:

On behalf of our members and supporters, we write to urge Environmental Protection Agency (“EPA”) to withdraw and replace the proposed rule for aircraft engine particulate matter, 87 Fed. Reg. 6,324 (“Proposed Rule”).

The Proposed Rule is woefully inadequate: EPA admits that it will not reduce emissions or improve air quality *at all*.¹ It does nothing for communities near airports that are bombarded every day with particulate pollution that can lead to cardiovascular disease, respiratory issues, and higher rates of death. And although technology exists to cut particulate matter pollution from planes, EPA did not undertake *any* analysis of these available options. Instead, it simply adopted the standards of the International Civil Aviation Organization (“ICAO”), which were written in collaboration with industry groups. ICAO’s standards intentionally lag behind current pollution control technologies,² and they allow emissions to rise as traffic increases.

This is the second “do-nothing” airplane rule the Biden administration has supported. EPA must reverse this trend of embracing weak, industry-developed standards and instead follow its Clean Air Act obligations to set limits that reduce harmful pollution from aircraft.³ We call on EPA to replace the Proposed Rule with one that will advance environmental justice and demonstrate international leadership.

Commercial Aviation Is Increasingly Poisoning Communities Near Airports

The Proposed Rule is EPA’s first attempt to set particulate matter standards for planes since the *early 1980s*, when EPA finalized “smoke standards” focused on improving visibility. In the nearly-forty years since those standards were enacted, scientific studies have produced mountains of evidence documenting that the fine particle pollution generated by fossil fuel combustion is deadly and environmentally destructive. For example, EPA’s independent

¹ Control of Air Pollution from Aircraft Engines: Emission Standards and Test Procedures, 87 Fed. Reg. 6,324, 6,327, 6,336 (Feb. 3, 2022) (to be codified at 40 C.F.R. pts. 87, 1030, 1031).

² *Id.* at 6,349.

³ 42 U.S.C. § 7401.

advisory scientific committee recently endorsed lowering national annual exposure limits for fine particle pollution in recognition of its health costs.⁴

Concentrations of ultrafine particles can be four or more times higher in areas surrounding airports.⁵ And in some regions, like Los Angeles, airplane traffic has grown to be as significant a contributor to elevated particle pollution as the entire urban freeway network.⁶ The small particles infiltrate homes, schools, and other gathering places where they are inhaled, pass into people's lungs, and move into their bloodstream to be carried throughout the body. Studies show that residents living near airports are more likely to be admitted to the hospital for asthma, have higher incidences of cancer and cardiopulmonary disease, and are more likely to die prematurely.⁷ One study in 2015 estimated that premature deaths due to fine particle emissions from aviation number nearly 14,000 per year globally.⁸

The harmful impacts of particle pollution fall most heavily on communities of color and low-income communities that disproportionately live near airports. These communities often already bear the brunt of climate change impacts and compounding air pollution from nearby industry and roadways. The Proposed Rule does not reduce particulate emissions from new planes beyond what manufacturers are already doing and does not regulate in-service planes.⁹ ICAO and aviation industry groups also estimate that airplane traffic levels will rebound quickly following the COVID-19 pandemic and more than triple in the coming decades.¹⁰ This means emissions are likely to *increase* with rising traffic, and the rule makes no effort to counteract this trend. With this Proposed Rule, EPA allows for further human suffering in already overburdened communities.

Aviation Pollution Can and Must Be Reduced Dramatically

To reduce particulate matter emissions from aircraft, EPA should set technology-forcing standards that apply across the airplane fleet, instead of to individual engines. The standards should: (1) cover aircraft in operation, not just new aircraft; (2) reduce emissions through

⁴ Reilly, Sean, *EPA science advisers unanimously back tighter soot limits*, E&E News (Mar. 4, 2022), <https://www.eenews.net/articles/epa-science-advisers-unanimously-back-tighter-soot-limits/>.

⁵ Hudda, N. et al., Impacts of aviation emissions on near-airport residential air quality, 54 Environmental Science & Technology 8580 (2020); Shirmohammadi, F. et al., Emission rates of particle number, mass and black carbon by the Los Angeles International Airport (LAX) and its impact on air quality in Los Angeles, 151 Atmospheric Environment 82 (2017).

⁶ Hudda, N. et al., Emissions from an international airport increase particle number concentrations 4-fold at 10 km downwind, 48 Environmental Science & Technology 6628 (2014).

⁷ Lin, S. et al., Residential proximity to large airports and potential health impacts in New York State, 81 Int. Arch. Occup. Environ. Health 797 (2008); Osaki, C. and Finkbonner, J., Final Report State Board of Health Priority: Environmental Justice (2001).

⁸ Yim, S.H.L. et al., Global, regional and local health impacts of civil aviation emissions, 10 Env'tl Research Letters 034001 (2015) (87% of 16,000 total premature deaths per year are attributable to fine particle pollution).

⁹ 87 Fed. Reg. at 6,347 (particulate matter standards are "technology-following").

¹⁰ International Civil Aviation Organization, ICAO global environmental trends – Present and future aircraft noise and emissions, A40-WP/54 (2019), https://www.icao.int/Meetings/A40/Documents/WP/wp_054_en.pdf; International Air Transport Association and Tourism Economics, Air Passenger Forecasts: Potential Paths for Recovery into the Medium- and Long-run (2020), <https://resources.oxfordeconomics.com/hubfs/Webinar%20presentations/Air-Passenger-Forecasts-potential-paths-for-recovery-into-medium-and-long-run.pdf>.

airplane designs and operational improvements in addition to engine technologies; and (3) include a ratchet mechanism to reduce total emissions over time.

EPA has previously recognized its broad authority to craft such standards,¹¹ and technology already exists to go much further than the rule proposes. Indeed, the Proposed Rule recognizes that many airplane engines powering planes *today* already meet the recommended standards for new planes and new types of planes by a “considerable margin.”¹² Yet EPA rubberstamped the standards without even studying options that would require more, rationalizing that the rule would “promote international harmonization” and “avoid placing U.S. manufacturers at a competitive disadvantage.” Under the Clean Air Act, these industry-friendly rationales cannot replace EPA’s obligation to protect public health and welfare by reducing and preventing pollution. EPA’s guiding principle must be effective pollution reduction, not “harmonization” with ineffective international standards.

Strong, technology-forcing standards will drive needed changes and create good, family-sustaining jobs in the aviation sector. And these standards should be paired with investment in climate adaptation and filtration technologies for communities near airports that have borne the brunt of historical pollution.

Conclusion

The undersigned organizations agree that EPA must immediately and significantly reduce particulate emissions from the aviation sector. We urge you to withdraw this Proposed Rule and commit to one that will reduce pollution.

When President Biden entered office, he acknowledged that federal government leadership and innovation is essential to protect public health and the environment; he pledged to be guided by science and to advance environmental justice.¹³ The White House specifically identified the do-nothing aircraft greenhouse gas emissions rule as one to be reviewed in light of the new administration’s focus on improving public health and tackling the climate crisis. Yet EPA has not followed through. The administration recently reversed course and opted to defend the aircraft greenhouse gas emissions rule. Now, it is proposing a similar ICAO-following, do-nothing rule for particulate matter. We urge EPA to get serious about airplane emissions and finally utilize the most effective tool in its possession: its regulatory power to set standards that reduce pollution fleetwide.

¹¹ In a 2008 notice EPA specifically discussed “a declining fleet average emissions program” that would involve consideration of efficiency gains from improved “engine, aircraft and operational [greenhouse gas] control[s].” Regulating Greenhouse Gas Emissions Under the Clean Air Act, 73 Fed. Reg. 44,354, 44,473 (July 30, 2008) (to be codified at 40 C.F.R. ch. 1). In a 2015 notice, EPA cited fuel venting and smoke number standards that applied to in-use aircraft and noted that “unlike the EPA’s authority to promulgate emission standards for motor vehicles under CAA section 202(a) or for nonroad engines and vehicles under section 213(a), section 231 of the CAA does not restrict the EPA’s authority to set standards for only new aircraft.” Proposed Finding That Greenhouse Gas Emissions From Aircraft Cause or Contribute to Air Pollution That May Reasonably Be Anticipated To Endanger Public Health and Welfare, 80 Fed. Reg. 37,758, 37,791 n.203 (July 1, 2015) (to be codified at 40 C.F.R. pts. 87, 1068).

¹² 87 Fed. Reg. at 6,348.

¹³ White House, Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis (Jan. 20, 2021), <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/>.

Sincerely,

1. Center for Biological Diversity
2. Friends of the Earth
3. Earthjustice
4. 1000 Grandmothers for Future Generations
5. 350 New Hampshire
6. 350 Seattle
7. 350 Seattle
8. 350 Triangle
9. 5G Free California
10. AbibiNsroma Foundation ANF
11. Accelerate Neighborhood Climate Action
12. AIRPORT IMPACT RELIEF (AIR Inc.)
13. Airport Impact Relief, Inc.
14. Animals Are Sentient Beings Inc
15. Anthropocene Alliance
16. Aviation-Impacted Communities Alliance (AICA)
17. Boston Fair Skies
18. Bronx Jews for Climate Action
19. Businesses for a Livable Climate
20. Call to Action Colorado
21. CatholicNetwork US
22. Chesapeake Bay Foundation
23. Christians For The Mountains
24. Church Women United in New York State
25. Citizens for Quiet Skies
26. City of Millbrae
27. CleanAirNow
28. CO Businesses for a Livable Climate
29. Community for Sustainable Energy
30. Concerned Residents of Palo Alto
31. Earth Action, Inc.
32. Eastie Farm
33. Eco-Eating
34. Endangered Habitats League
35. Endangered Species Coalition
36. Extinction Rebellion San Francisco Bay Area
37. Fairbanks Climate Action Coalition
38. Faithful America
39. Flight Free USA
40. Food & Water Watch
41. FracTracker Alliance
42. Fund for Wild Nature
43. George Mason University Center for Climate Change Communication
44. Global Anti-Aerotropolis Movement (GAAM)
45. Great Egg Harbor Watershed Association
46. Great Old Broads for Wilderness
47. Greater New Orleans Housing Alliance

48. Hudson River Sloop Clearwater
49. Huntsville Progressive Letter Writers
50. I-70 Citizens Advisory Group
51. Indivisible Ambassadors
52. Kickapoo Peace Circle
53. KyotoUSA
54. Logan Aircraft Noise Working Group
55. Mayfair Park Neighborhood Association Board
56. Mental Health & Inclusion Ministries
57. Montbello Neighborhood Improvement Association
58. North Range Concerned Citizens
59. Ocean Conservation Research
60. Oregon Aviation Watch
61. Pelican Media
62. Plane Sense 4 Long Island
63. Public Lands Project
64. Quiet Communities
65. Quiet Skies Coalition
66. Quiet Skies Jefferson County
67. Rachel Carson Council
68. RapidShift Network
69. Resource Renewal Institute
70. Revere City Counsellor
71. Sacred America
72. Santa Cruz Climate Action Network
73. Save EPA
74. Save our Skies Alliance
75. Save Our Skies East Bay
76. SAVE THE FROGS!
77. Sequoia ForestKeeper®
78. Sisters of St. Dominic of Blauvelt, New York
79. Small Business Alliance
80. SoCal 350 Climate Action
81. Southwest Organization for Sustainability
82. Spirit of the Sun, Inc.
83. Spottswoode Winery, Inc.
84. Stand.earth
85. Stop OAK Expansion
86. Syracuse Cultural Workers
87. System Change Not Climate Change
88. The Green House Connection Center
89. Transition Sebastopol
90. Trenton Threatened Skies
91. Turtle Island Restoration Network
92. Unite North Metro Denver
93. Utah Physicians for a Healthy Environment
94. Valley Watch, Inc.
95. Vote Climate
96. Wall of Women
97. Wasatch Clean Air Coalition
98. WATCH, INC

99. WESPAC Foundation, Inc.
100. Western Slope Businesses for a Livable Climate
101. Wilwerding Consulting, Co-Chair, Littleton Business Alliance
102. Womxn from the Mountain
103. Working for Racial Equity
104. Youth Vs Apocalypse