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EPAExecSec <EPAExecSec@epa.gov>
FW: Quiet Communities -- Notice of Intent to Sue Under Noise Control Act
To: "CMS.OEX" <cms.oex@epa.gov>

From: Sanne H. Knudsen <sknudsen@uw.edu>
Sent: Friday, March 17, 2023 5:03 PM
To: Regan, Michael <Regan.Michael@epa.gov>
Cc: McCabe, Janet <McCabe.Janet@epa.gov>; Prieto, Jeffrey (he/him/his) <Prieto.Jeffrey@epa.gov>; Goffman, Joseph <Goffman.Joseph@epa.gov>; Erica Proulx - Diehl Fellow, UW Law <uwdiehl fellow@uw.edu>
Subject: Quiet Communities -- Notice of Intent to Sue Under Noise Control Act

Dear Administrator Regan –

On behalf of Quiet Communities, Inc., and Jeanne Kempthorne, we submit the attached notice of intent to sue for failure to perform non-discretionary duties under the Noise Control Act 42 U.S.C. § 4911(a)(2)(A).

Pursuant to 40 CFR § 210.2(b), we have also sent this notice via certified mail earlier today, with a separate copy to Attorney General Garland. Please let us know if you have any trouble accessing the attached.

Regards,

Sanne Knudsen

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March 17, 2023

BY CERTIFIED MAIL AND EMAIL, RETURN RECEIPT REQUESTED

Honorable Michael S. Regan
Administrator
Environmental Protection Agency
Office of the Administrator, Mail Code 1101A
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
(202) 564-4700
Regan.Michael@epa.gov

RE: 60-Day Notice of Intent to Sue Under the Noise Control Act

Dear Administrator Regan:

This letter constitutes a 60-day notice of intent to sue the U.S. Environmental Protection Agency (EPA or Agency) and Michael S. Regan in his official capacity as Administrator of the EPA for violations of the Noise Control Act of 1972 (42 U.S.C. § 4901, *et seq.*). Unless the EPA reengages its statutory responsibilities under the Noise Control Act, Quiet Communities, Inc. (QCi) and Jeanne Kempthorne (together “Claimants”) intend to file litigation under the citizen suit provision of the Noise Control Act (42 U.S.C. § 4911) for failure to perform nondiscretionary duties.¹

Congress passed the Noise Control Act in 1972.² Alongside its contemporary counterparts—the Clean Air Act³ and the Clean Water Act⁴—the Noise Control Act is supposed to protect Americans from harmful pollutants that jeopardize their health and welfare.⁵ And yet, forty years ago, the EPA walked away from its Noise Control Act responsibilities full stop,

¹ 42 U.S.C. § 4911(a)(2)(A).

² Noise Control Act of 1972, Pub. L. No. 92-574, 86 Stat. 1234.

³ 42 U.S.C. § 7401, *et seq.*

⁴ 33 U.S.C. § 1251, *et seq.*

⁵ *See, e.g.*, 42 U.S.C. § 4901(b) (“The Congress declares that it is the policy of the United States to promote an environment for all Americans free from noise that jeopardizes their health or welfare.”); 42 U.S.C. § 7401 (identifying promotion of the public health and welfare and pollution prevention as declarations and goals of the Clean Air Act); 33 U.S.C. § 1251 (indicating that pollution prevention is a primary goal of the Clean Water Act).

turning its back entirely on a major pollution control statute and category of public health harms.⁶

Because the EPA has failed to uphold its responsibilities under the Act and address noise pollution alongside other public health matters as Congress intended, for forty years the American people have been without a leader in developing, funding, disseminating, and coordinating information about the serious health impacts of noise pollution. In addition, state and local governments have been without the support—of information, of funding, of expertise—that the EPA was charged with providing to local communities and state governments. In all that time, harmful noise sources have gone unidentified and unregulated despite the onslaught of new products and technology; the EPA’s efforts to enforce existing noise regulations or advance new ones have stalled; and environmental justice communities have been subjected to the cumulative and disproportionate impacts of noise.

In particular, the EPA has violated the following provisions of the Noise Control Act:

- EPA’s nondiscretionary duty to review, revise, and supplement published noise criteria under Sections 5(a)(1) and 5(c) (42 U.S.C. § 4904(a)(1), (c)).
- EPA’s nondiscretionary duty to review, revise, and supplement published information on safe levels of environmental noise under Sections 5(a)(2) and 5(c) (42 U.S.C. § 4904(a)(2), (c)).
- EPA’s nondiscretionary duty to identify and regulate major sources of noise under Sections 5(b), 5(c), 6(a), and 6(c) (42 U.S.C. §§ 4904(b), (c); 4905(a), (c)).
- EPA’s nondiscretionary duty to develop low-noise-emission products under Section 15 (42 U.S.C. § 4914).
- EPA’s nondiscretionary duty to designate products and promulgate labeling regulations under Section 8 (42 U.S.C. § 4907).
- EPA’s nondiscretionary duty to coordinate and regularly consult with federal agencies and report on their noise control programs under Section 4(c) (42 U.S.C. § 4903(c)).
- EPA’s nondiscretionary duty to assist state and local governments in developing effective noise control programs under the Quiet Communities Act of 1978, Section 14 of the Noise Control Act (42 U.S.C. § 4913).

The EPA’s legal obligations to reengage the mandates of the Noise Control Act are clear. In addition, as a policy matter, a decision by the EPA to reengage its obligations under the Noise Control Act would directly advance the four foundational principles articulated by the Administrator in the Agency’s *Fiscal Year (FY) 2022–2026 EPA Strategic Plan*: 1) follow the

⁶ See *infra* App. A.

science; 2) follow the law; 3) be transparent; and 4) advance justice and equity.⁷ To that end, nearly 2,000 peer-reviewed scientific articles on the serious health impacts of noise have been published since the EPA abandoned its duties under the Noise Control Act.⁸ The science shows the health of more than 100 million Americans is at risk from exposure to excessive noise—for hearing damage, cardiovascular disease, psychological disorders, and other serious adverse health impacts.⁹ Not only that, but noise also has significant disproportionate impacts on low-income and marginalized communities, predisposing community members to poorer health and learning outcomes.¹⁰ Addressing public health harms from noise pollution advances Executive Order 14008 and the EPA’s purported commitment to justice and equity.¹¹ Finally, by reengaging the Noise Control Act, the EPA can start to undo what has been a failure of transparency at the most basic level—the EPA’s silence on noise has left the public and all other levels of government without the knowledge and tools to make informed decisions about harms associated with exposure to noise pollution.¹²

Claimants urge the EPA to restore its work under this important public health Act and are open to collaborating with the EPA to ensure noise pollution receives the attention Congress intended. To that end, Claimants ask for a meeting with the EPA in the next sixty (60) days to discuss the EPA’s responsibilities under the Noise Control Act. However, if the Agency is not prepared to assume its statutory obligations, to uphold its mission and foundational principles, and to protect the public from the harms of noise pollution, Claimants intend to file suit and seek all appropriate relief for the reasons detailed in this letter.

NOISE CONTROL ACT VIOLATIONS

The Noise Control Act uses the word “shall” more than one hundred times to set out the EPA’s nondiscretionary duties.¹³ For four decades, the EPA has ignored these responsibilities. In particular, the EPA has abdicated its duties to carry out the following statutory mandates:

⁷ U.S. ENV’T PROT. AGENCY, FY 2022–2026 EPA STRATEGIC PLAN 5 (2022) [hereinafter FY 2022–2026 EPA STRATEGIC PLAN], <https://www.epa.gov/system/files/documents/2022-03/fy-2022-2026-epa-strategic-plan.pdf>.

⁸ *See infra* App. B; *see also infra* section A.

⁹ *See infra* App. B; *see also infra* section A.

¹⁰ *See infra* section G; App. E.

¹¹ *See infra* section G; App. E.

¹² *See infra* sections A–G.

¹³ 42 U.S.C. § 4901, *et seq.*

A. EPA'S NONDISCRETIONARY DUTY TO REVIEW, REVISE, AND SUPPLEMENT PUBLISHED NOISE CRITERIA; EPA'S NONDISCRETIONARY DUTY TO PUBLISH AND REVISE INFORMATION ON SAFE LEVELS OF ENVIRONMENTAL NOISE

Section 5(a)(1) of the Noise Control Act (42 U.S.C. § 4904(a)(1)) states that the EPA *shall* “develop and publish criteria with respect to noise.”¹⁴ Those criteria “shall reflect the scientific knowledge most useful in indicating the kind and extent of all identifiable effects on the public health or welfare which may be expected from differing quantities and qualities of noise.”¹⁵ Section 5(c) (42 U.S.C. § 4904(c)) requires the EPA to review and, as appropriate, revise and supplement those criteria “from time to time.”¹⁶ The EPA developed an initial criteria document in 1973,¹⁷ but has not revised or supplemented those criteria in nearly fifty years despite significant advancements in science. The EPA’s failure to do so is a violation of the Noise Control Act.

Section 5(a)(2) of the Act (42 U.S.C. § 4904(a)(2)) also states that the EPA *shall* “publish information on the levels of environmental noise the attainment and maintenance of which in defined areas under various conditions are requisite to protect the public health and welfare with an adequate margin of safety.”¹⁸ Section 5(c) requires the EPA to review and, as appropriate, revise and supplement any reports published under Section 5 “from time to time.”¹⁹ The EPA identified initial safe levels in 1974,²⁰ but has not reviewed, revised, or supplemented them in nearly fifty years despite significant advancements in science. The EPA’s failure to do so is a violation of the Noise Control Act.

A bit of background helps illustrate the gravity of the EPA’s failure to review, revise, and supplement its published noise criteria or information on safe levels of noise in half a century:

More than fifty years ago, Congress declared noise a public health hazard,²¹ recognizing that it causes or contributes to hearing damage, cardiovascular disease, metabolic disease, and

¹⁴ 42 U.S.C. § 4904(a)(1).

¹⁵ *Id.*

¹⁶ 42 U.S.C. § 4904(c).

¹⁷ U.S. ENV’T PROT. AGENCY, PUBLIC HEALTH AND WELFARE CRITERIA FOR NOISE (1973).

¹⁸ 42 U.S.C. § 4904(a)(2).

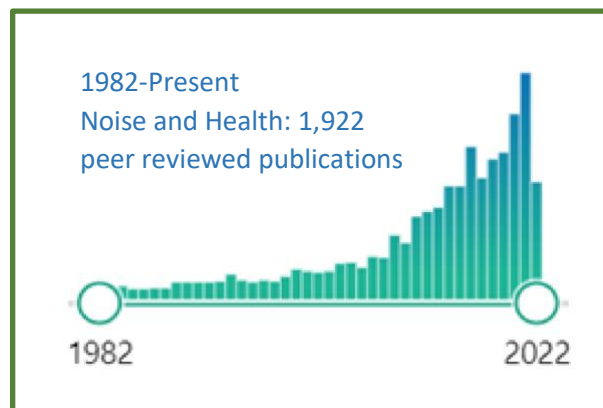
¹⁹ 42 U.S.C. § 4904(c).

²⁰ U.S. ENV’T PROT. AGENCY, 550/9-75-004, INFORMATION ON LEVELS OF ENVIRONMENTAL NOISE REQUISITE TO PROTECT PUBLIC HEALTH AND WELFARE WITH AN ADEQUATE MARGIN OF SAFETY (1974) [hereinafter INFORMATION ON SAFE LEVELS OF NOISE].

²¹ 42 U.S.C. § 4901; Am. Speech & Hearing Ass’n, *Proceedings of the Conference Noise as a Public Health Hazard*, 4 AM. SPEECH & HEARING ASS’N REPS. (W. Dixon Ward & James E. Fricke eds., 1968).

psychological disorders.²² Throughout the 1970s, the EPA’s Office of Noise Abatement and Control, established under the Clean Air Act of 1970, made substantial progress on controlling noise,²³ including its 1974 publication defining safe levels of noise exposure.²⁴ Those efforts, however, ground to a halt in 1981.²⁵

Nearly 1,850 peer-reviewed scientific articles on the health impacts of noise have been published since 1982,²⁶ strengthening what was known, establishing the existence of additional impacts and sources of noise, and elucidating the cellular and molecular mechanisms by which noise causes harm. In December 2022, The *Los Angeles Times* published an article on the “rising onslaught of harmful noise.”²⁷ Peter James, an assistant professor of environmental health at Harvard University’s T.H. Chan School of Public Health, explains that “[w]hen there’s a loud noise, the auditory system signals that something is wrong, triggering a fight-or-flight response in the body and flooding it with stress hormones that cause inflammation and can ultimately lead to disease.”²⁸ The article also cites research that shows that “[c]onstant exposure to noise increases the risk of heart disease by 8% and diabetes by 6%” and that “[t]he European Environment Agency estimated in 2020 that noise exposure causes about 12,000 premature deaths and 48,000 cases of heart disease each year in Western Europe.”²⁹



²² *Id.*

²³ U.S. ENV’T PROT. AGENCY, NOISE CONTROL PROGRAM: PROGRESS TO DATE—1980 (1980) [hereinafter NOISE CONTROL PROGRAM: PROGRESS TO DATE].

²⁴ INFORMATION ON SAFE LEVELS OF NOISE, *supra* note 20.

²⁵ *See infra* App. A.

²⁶ *See infra* App. B.

²⁷ Rachel Bluth, *Lost Sleep, Jangled Nerves, Panicked Pets: The Rising Onslaught of Harmful Noise*, L.A. TIMES (Dec. 27, 2022, 5:00 AM), <https://www.latimes.com/california/story/2022-12-27/lost-sleep-jangled-nerves-panicked-pets-the-rising-onslaught-of-noise-harms-mind-and-body>.

²⁸ *Id.*

²⁹ *Id.*

Other organizations, recognizing the strength of scientific evidence, have acted. In 2018, the World Health Organization published updated guidelines for major environmental noise sources based on the strength of current scientific evidence.³⁰ The new guidelines substantially lowered the previously identified safe thresholds of noise.³¹ Additionally, in 2017, the American Academy of Nursing issued a position statement on the harms of environmental noise,³² and, in 2021, the American Public Health Association (APHA) published a policy statement, *Noise as a Public Health Hazard*,³³ summarizing the science of why noise is a public health hazard and calling on the EPA to reactivate the federal noise control program.³⁴ These extensively referenced documents affirm that:

- Loud noise can cause hearing loss, tinnitus, and hyperacusis;³⁵
- Noise-induced hearing loss affects more than 30 million Americans;³⁶
- Chronic noise, even at low levels, contributes to ischemic heart disease, heart attack, stroke, sleep disruption, diabetes and obesity, anxiety and depression, and early death;³⁷
- 145 million Americans are estimated to be at risk for noise-related hypertension;³⁸
- Nighttime aviation noise is associated with death from acute cardiovascular events;³⁹
- The adverse impacts of noise cost billions of dollars each year for direct and indirect medical expenses and work productivity losses;⁴⁰ and
- Noise impairs children’s learning and interferes with cognitive development, resulting in poorer reading comprehension, memory, listening skills, and test scores.⁴¹

In addition to human health, a substantial body of scientific research indicates man-made (anthropogenic) noise is an environmental stressor adversely affecting many land and marine

³⁰ WORLD HEALTH ORG., ENVIRONMENTAL NOISE GUIDELINES FOR THE EUROPEAN UNION (2018).

³¹ *Id.* at xv–xviii.

³² Sally Lechlitner Lusk, Marjorie McCullagh & Victoria Vaughan Dickson, *Reduce Noise: Improve the Nation’s Health*, 65 NURSING OUTLOOK 652 (2017).

³³ *Noise as a Public Health Hazard*, AM. PUBLIC HEALTH ASS’N (Oct. 26, 2021), <https://apha.org/Policies-and-Advocacy/Public-Health-Policy-Statements/Policy-Database/2022/01/07/Noise-as-a-Public-Health-Hazard>.

³⁴ *Id.*; see also App. C.

³⁵ Lechlitner Lusk et al., *supra* note 32, at 652–53; WORLD HEALTH ORG., *supra* note 30, at xiv, 1–2, 11–19; *Noise as a Public Health Hazard*, *supra* note 33.

³⁶ *Noise as a Public Health Hazard*, *supra* note 33.

³⁷ *Id.*; Lechlitner Lusk et al., *supra* note 32, at 652–53.

³⁸ *Noise as a Public Health Hazard*, *supra* note 33.

³⁹ Thomas Munzel, Sebastian Steven, Omar Hahad & Andreas Daiber, *Noise and Cardiovascular Risk: Nighttime Aircraft Noise Acutely Triggers Cardiovascular Death*, 42 EUR. HEART J. 844 (2021); Apolline Saucy, Beat Schaffer, Louise Tangermann, Danielle Vienneau, Jean-Marc Wunderli & Martin Roosli, *Does Night-Time Aircraft Noise Trigger Mortality? A Case-Crossover Study on 24,886 Cardiovascular Deaths*, 42 EUR. HEART J. 835 (2021).

⁴⁰ Lechlitner Lusk et al., *supra* note 32, at 653; *Noise as a Public Health Hazard*, *supra* note 33.

⁴¹ Lechlitner Lusk et al., *supra* note 32, at 652–53; *Noise as a Public Health Hazard*, *supra* note 33.

species (e.g., amphibians, arthropods, birds, fish, mammals, mollusks, and reptiles),⁴² and contributes to losses in biodiversity.⁴³ Since 2000, approximately 300 peer-reviewed articles have been published in scientific literature on the impacts of anthropogenic noise on ecosystems.⁴⁴ These studies show that anthropogenic noise interrupts animals' ability to communicate, find reproductive partners and prey, and evade predators, and also disrupts habitats, patterns of migration, and seed dispersal—all factors that may affect human agricultural production.

The EPA is fully aware of the serious health impacts of noise, particularly in regard to human health. Updated as recently as August 2022, its own website states the following:

Noise pollution adversely affects the lives of millions of people. Studies have shown that there are direct links between noise and health. Problems related to noise include stress related illnesses, high blood pressure, speech interference, hearing loss, sleep disruption, and lost productivity. Noise Induced Hearing Loss (NIHL) is the most common and often discussed health effect, but research has shown that exposure to constant or high levels of noise can cause countless adverse health affects [sic].⁴⁵

Despite advances in science and in guidelines published by other public health organizations, despite its own admission that “noise pollution adversely affects the lives of millions of people,” the EPA’s 1974 safe noise levels document has not been updated. By not updating the criteria and levels reports to reflect significant advancements in science, the EPA has put public health, worker health, and the viability of our ecosystems at risk:

- The public lacks the information they need to understand safe levels to protect their hearing and non-hearing health. Congress, through the Noise Control Act, mandated the

⁴² Hansjoerg P. Kunc & Rouven Schmidt, *The Effects of Anthropogenic Noise on Animals: A Meta-Analysis*, 15 BIOLOGY LETTERS, 2019, at 1–5.

⁴³ Romain Sordello, Ophelie Ratel, Frederique Flamerie De Lachapelle, Clement Leger, Alexis Dambry & Sylvie Vanpeene, *Evidence of the Impact of Noise Pollution on Biodiversity: A Systematic Map*, 9 ENV'T EVIDENCE, Sept. 2020.

⁴⁴ See *infra* App. D.

⁴⁵ *Clean Air Act Title IV—Noise Pollution*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/clean-air-act-overview/clean-air-act-title-iv-noise-pollution#:~:text=Noise%20pollution%20adversely%20affects%20the,sleep%20disruption%2C%20and%20lost%20productivityU.S> (last updated Aug. 11, 2022).

EPA to make this and similar information widely available, but the Agency has not done so for fifty years.⁴⁶

- Other federal agencies lack the means to educate the public, health and education professionals, state and local governments, and industry on noise-related harm. For example:
 - The Centers for Disease Control offer little, if any, information on the impact of noise on cardiovascular health, despite overwhelming evidence.⁴⁷ Without this information, professional societies, like the American College of Cardiology, do not include noise in their guidelines on hypertension, for instance.⁴⁸
 - The Federal Aviation Administration’s noise thresholds are twice as loud as those in the EPA’s 1974 levels document and are four times as loud as the 2018 World Health Organization’s guidelines.⁴⁹ The Administrator of the Environmental Protection Agency has the authority to propose, consult on, and challenge FAA noise guidelines when they are inconsistent with science,⁵⁰ but, as with all other duties under the Noise Control Act, it has failed to do so.
- State and local officials do not have the guidance or support they need to respond to citizen complaints and to enact policies to protect the general health and welfare of the public.⁵¹
- Researchers in the United States lack adequate funding to study noise, its effects, its full economic costs, and means of mitigation.⁵² As Peter James stated, “The U.S. hasn’t really funded noise control or noise research since the 1980s. It’s a big problem.”⁵³

In short, the EPA, in violation of Congressional mandates, is ignoring more than fifty years of scientific research on the effects of noise. The EPA has a nondiscretionary duty under Section 5 of the Noise Control Act to revise and supplement noise criteria and the safe levels

⁴⁶ 42 U.S.C. §§ 4904, 4905, 4907, 4913; App. A.

⁴⁷ See, e.g., *Loud Noise Can Cause Hearing Loss*, CTNS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/nceh/hearing_loss/public_health_scientific_info.html (last updated Dec. 11, 2018) (not including any references to cardiovascular or heart health and showing CDC’s limited focus on noise and hearing loss).

⁴⁸ See, e.g., Paul K. Whelton et al., *2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults*, 71 J. AM. COLL. CARDIOLOGY, no. 19, 2018, at e127–248 (making no reference to noise); David C. Goff et al., *2013 ACC/AHA Guideline on the Assessment of Cardiovascular Risk*, 63 J. AM. COLL. CARDIOLOGY, no. 25, 2014, at 2935–59 (making no reference to noise).

⁴⁹ RACHEL Y. TANG, CONG. RSCH. SERV., R46920, FEDERAL AIRPORT NOISE REGULATIONS AND PROGRAMS 6 (2021) (noting that the FAA has identified a day-night average sound level of 65 decibels (dB) as the safe threshold for aircraft noise); INFORMATION ON SAFE LEVELS OF NOISE, *supra* note 20, at 39–41 (identifying 45 dB as a safe indoor noise level and 55 dB as a safe outdoor noise level); WORLD HEALTH ORG., *supra* note 30, at xvii (strongly recommending less than 45 dB for all aircraft noise and less than 40 dB for nighttime aviation noise).

⁵⁰ 49 U.S.C. § 44715.

⁵¹ See *infra* section F; see also SIDNEY A. SHAPIRO, THE DORMANT NOISE CONTROL ACT AND OPTIONS TO ABATE NOISE POLLUTION 17–34 (1991); Sidney A. Shapiro, *Lessons from a Public Policy Failure: EPA and Noise Abatement*, 19 ECOLOGY L.Q. 1, 30–44 (1992) [hereinafter *Lessons from a Public Policy Failure*].

⁵² Stephanie Dutchen, *The Effects of Noise on Health*, HARV. MED., Spring 2022, <https://hms.harvard.edu/magazine/viral-world/effects-noise-health>.

⁵³ *Id.*

report to close this widening divide between science and policy.⁵⁴ Failure to do so deprives the public, state and local officials, and health professionals of the scientific evidence on levels and types of noise that should be avoided or abated, jeopardizing the health of tens of millions of Americans.⁵⁵

B. EPA'S NONDISCRETIONARY DUTY TO IDENTIFY AND REGULATE MAJOR NOISE SOURCES

Under Section 5(b) of the Act (42 U.S.C. § 4904(b)), “[t]he Administrator shall . . . compile and publish a report or series of reports (1) identifying products (or classes of products) which in his judgment are major sources of noise, and (2) giving information on techniques for control of noise from such products, including available data on the technology, costs, and alternative methods of noise control.”⁵⁶ Section 5(c) requires the EPA to review and, as appropriate, revise and supplement any reports published under Section 5 “from time to time.”⁵⁷ Additionally, under Section 6 of the Act (42 U.S.C. § 4905(a), (c)), the Administrator is required to publish proposed regulations for products identified as major sources of noise under Section 5 within eighteen months of their identification.⁵⁸ These regulations “shall” include noise emission standards and limits on noise emissions “requisite to protect the public health and welfare.”⁵⁹

In the 1970s, the Agency issued several separate product identification reports under Section 5(b). The first report, published June 21, 1974,⁶⁰ addressed portable air compressors and medium and heavy trucks, for which regulations were promulgated.⁶¹ The Agency subsequently identified, on May 28, 1975, wheel and crawler tractors (construction equipment); truck-mounted solid waste compactors (garbage trucks); motorcycles and motorcycle replacement exhaust

⁵⁴ 42 U.S.C. § 4904(a), (c); Arline L. Bronzaft, *Impact of Noise on Health: The Divide Between Policy and Science*, 5 OPEN J. SCIS. 108 (2017).

⁵⁵ *Noise as a Public Health Hazard*, *supra* note 33.

⁵⁶ 42 U.S.C. § 4904(b).

⁵⁷ 42 U.S.C. § 4904(c).

⁵⁸ 42 U.S.C. § 4905(a)(1), (a)(2)(B).

⁵⁹ 42 U.S.C. § 4905(c)(1).

⁶⁰ 39 Fed. Reg. 22297 (June 21, 1974).

⁶¹ 40 C.F.R. §§ 204.50–204.59; 40 C.F.R. §§ 205.50–205.59.

systems; buses; and truck transport refrigeration units.⁶² In 1977, the Agency also published reports identifying power lawn mowers,⁶³ pavement breakers, and rock drills⁶⁴ as major sources of noise.

Even though Section 6 requires the EPA to publish proposed regulations for all products identified in the Section 5(b) reports *within 18 months of issuing those reports*,⁶⁵ the EPA has neither proposed regulations nor finally withdrawn the identification report for at least four of these major sources of noise: lawn mowers, truck transport refrigeration units, pavement breakers, and rock drills.⁶⁶ In other words, the Agency is over forty years late on a mandatory action: proposing and publishing regulations no later than eighteen months after a report is published identifying any product as a major source of noise.⁶⁷

Moreover, it has been over forty years since the Administrator identified any new major sources of noise for regulation, despite the introduction of personal listening devices, noisy toys and consumer products, noisy outdoor power equipment used in land care and construction, drones and urban air mobility, cryptomining, and the tremendous increase in conventional transportation noise.⁶⁸ Gas-powered leaf blowers, for example, are widely recognized as serious sources of noise for workers and the public—so much so that over 200 communities across the country have enacted ordinances to control their use.⁶⁹ The noise levels of these products exceed safe occupational levels by orders of magnitude and are harmful to workers and the public.⁷⁰ Reasonable alternatives, like battery-powered blowers, exist and are much quieter.⁷¹ And yet, individuals and communities continue to suffer from the noise of nationally sold products that Congress otherwise intended be controlled on a uniform, nationwide basis.

⁶² 40 Fed. Reg. 23105 (May 28, 1975).

⁶³ 42 Fed. Reg. 2525 (Jan. 12, 1977).

⁶⁴ 42 Fed. Reg. 6722 (Feb. 3, 1977).

⁶⁵ 42 U.S.C. § 4905(a)(1), (a)(2)(B).

⁶⁶ *See, e.g.*, 47 Fed. Reg. 54108 (Dec. 1, 1982) (*proposing* to withdraw identification of these major sources of noise; there is no indication that this proposed withdrawal ever became final).

⁶⁷ 42 U.S.C. § 4905(a)(2)(B).

⁶⁸ *Noise as a Public Health Hazard*, *supra* note 33; *Common Noise Levels—How Loud Is Too Loud?*, INT’L NOISE AWARENESS DAY, <https://noiseawareness.org/info-center/common-noise-levels/> (last visited Feb. 2, 2023); Kevin Williams, *A Neighborhood’s Cryptocurrency Mine: ‘Like a Jet that Never Leaves’*, WASH. POST (Aug. 31, 2022, 1:01 PM), <https://www.washingtonpost.com/business/interactive/2022/cryptocurrency-mine-noise-homes-nc/>; Beat Schaffer, Reto Pieren, Kurt Heutschi, Jean Marc Wunderli & Stefan Becker, *Drone Noise Emission Characteristics and Noise Effects on Humans—A Systematic Review*, 18 INT’L J. ENV’T RSCH. & PUB. HEALTH 5940 (2021).

⁶⁹ Chris Pollock, Geoffrey Sparks & Jamie L. Banks, *Lawn and Garden Equipment Sound: A Comparison of Gas and Battery Electric Equipment*, 3 J. ENV’T & TOXICOLOGICAL STUD., Oct. 30, 2018.

⁷⁰ *Id.* at 7.

⁷¹ *Id.*

Given the advancements in scientific knowledge about the wide range and seriousness of public health harms from excessive noise exposure along with the development and use of new major noise sources, the EPA has failed to perform its nondiscretionary duty to identify and regulate major sources of noise for the last forty years, harming the American public and the ecosystems in which they live. Furthermore, the Agency is forty-five years late in proposing and publishing regulations for four products that were identified as major sources of noise in the 1970s. This violation of Sections 5(b) and 6 of the Act has allowed unregulated use of products identified under the Act as having the potential to harm public health and welfare.

C. EPA'S NONDISCRETIONARY DUTY TO DEVELOP LOW-NOISE-EMISSION PRODUCTS

The EPA's failure to adopt emission standards for any products under Sections 5 and 6 of the Act during the last forty years has had other adverse ramifications for the EPA's ability to carry out its responsibilities under the Act, like those required by Section 15 (42 U.S.C. § 4914). Section 15 assigns the EPA responsibility for developing low-noise-emission products (LNEPs). LNEPs are defined as those that "emit[] noise in amounts significantly below the levels specified in noise emission standards."⁷² Section 15 provides that the "Administrator shall determine which products qualify as low-noise-emission products" upon receipt of a certification application,⁷³ and that the federal government "shall" acquire certified LNEPs for "use by the Federal Government in lieu of other products."⁷⁴ In short, Section 15 orders federal agencies to identify and purchase LNEPs that emit "significantly" less noise than permitted by the applicable emission standards.

The EPA issued certification procedures for LNEPs in 1974⁷⁵ and issued a Notice of Proposed Rulemaking for criteria and procedures for use by the EPA in determining whether a product can be certified as an LNEP suitable for purchase by the federal government.⁷⁶ However, the statute authorizes the EPA to define an LNEP only after the EPA has promulgated emissions standards for a product.⁷⁷ Such emission standards are required in regulations promulgated for

⁷² 42 U.S.C. § 4914(a)(3).

⁷³ 42 U.S.C. § 4914(b).

⁷⁴ 42 U.S.C. § 4914(c).

⁷⁵ 40 C.F.R. § 203.

⁷⁶ 42 Fed. Reg. 27442 (May 27, 1977).

⁷⁷ *Lessons from a Public Policy Failure*, *supra* note 51, at 61 & n.96.

identified major sources of noise under Sections 5 and 6 of the Act.⁷⁸ But because emission standards were only promulgated for four products at the time the EPA abandoned the Noise Control Act, the Agency did not make much, if any, progress in administering LNEP purchases by the federal government.⁷⁹

Together, this means the EPA has not been upkeeping the LNEP certification process, and, without that certification process, the products purchased by other federal agencies over the last forty years have not been responsive to Congress's mandate that federal purchases of products avoid excessive noise where possible. This means that more people, including federal workers and those subject to federal government noise, have needlessly suffered from excessive noise exposure. Congress had a system for limiting this exposure, but, along with the rest of the Noise Control Act, the EPA has abdicated its duty to develop LNEPs under Section 15 as a direct consequence of its failure to comply with nondiscretionary duties to identify major sources of noise and set emissions standards for those products under Sections 5 and 6.

D. EPA'S NONDISCRETIONARY DUTY TO ADOPT REGULATIONS IDENTIFYING AND ESTABLISHING LABELING REQUIREMENTS

Section 8 of the Noise Control Act (42 U.S.C. § 4907) provides that the Administrator “shall by regulation designate any product (or class thereof)—(1) which emits noise capable of adversely affecting the public health or welfare; or (2) which is sold wholly or in part on the basis of its effectiveness in reducing noise.”⁸⁰ “For each product (or class thereof) designated . . . the Administrator shall by regulation require notice be given to the prospective user of the level of the noise the product emits, or of its effectiveness in reducing noise” through labeling requirements.⁸¹ The EPA has failed to satisfy Section 8's labeling requirements, both as to products that cause harm from noise and as to products that are capable of reducing harm from noise.

To date, the EPA has designated and regulated only a single product under Section 8: hearing protectors.⁸² The labeling requirements for this product were meant to allow users to accurately estimate the degree of mitigation of noise they would receive when wearing the

⁷⁸ 42 U.S.C. § 4905(c)(1).

⁷⁹ *Lessons from a Public Policy Failure*, *supra* note 51, at 61 & n.96.

⁸⁰ 42 U.S.C. § 4907(a).

⁸¹ 42 U.S.C. § 4907(b).

⁸² 40 C.F.R. § 211.210–211.214.

protectors and to assist them in choosing a product with the appropriate level of protection depending on their noise environment (such as operating noisy equipment).⁸³ However, the labeling regulations for hearing protective devices are now so outdated that they impede public health improvements in a couple of ways.

First, the testing standards the EPA relied on in 1979, the American National Standards Institute (ANSI) S3.19-1974,⁸⁴ have since been withdrawn and replaced with a more accurate standard.⁸⁵ The older method is the basis of a device's noise reduction rating, or NRR, displayed on hearing protection devices as a single number of the optimum decibel (dB) level the device may reduce.⁸⁶ The NRR is so unreliable that OSHA applies a "safety factor" by subtracting 7 dB from the labeled NRR and reducing that number by 50% to get a more realistic measurement.⁸⁷

Second, technology has advanced in the succeeding decades, introducing new hearing protective devices, including those that have electronic noise reduction and others that combine a microphone with protective headsets for better communication.⁸⁸ Unfortunately, none of these advanced devices can currently be sold as hearing protection devices because the measuring and testing standards required in the regulations are too old to apply to advanced electronics.⁸⁹ Industry has asked the EPA to amend the testing procedures in the regulation to ensure an accurate assessment of their performance, but the EPA has failed to amend even this single listing.⁹⁰

The problem extends beyond the EPA's failure to stay current with its regulation of hearing protectors. The problem also lies in the EPA's failure to initiate labeling requirements for other products. In the 1970s, the EPA had studies underway on several household and consumer products to determine their candidacy for noise labeling,⁹¹ but the EPA did not

⁸³ 44 Fed. Reg. 56120, 56130–31 (Sept. 28, 1979).

⁸⁴ 40 C.F.R. §§ 211.206-1(a), 211.206-2(a).

⁸⁵ 2009 Proposed Labeling, 74 Fed. Reg. 39149, 39152 (proposed Aug. 5, 2009).

⁸⁶ 40 C.F.R. § 211.204-4.

⁸⁷ OCCUPATIONAL SAFETY & HEALTH ADMIN., TECHNICAL MANUAL sec. III, chap. 5, app. F, <https://www.osha.gov/otm/section-3-health-hazards/chapter-5#appendix> (last updated July 6, 2022). As a given example, a worker exposed to 98 dBA and wearing hearing protectors with an NRR of 25 dBA would still be exposed to 89 dBA (98 dBA - [(25-7)x50%] = 89 dBA). *Id.*

⁸⁸ 2009 Proposed Labeling, 74 Fed. Reg. 39149, 39151 (proposed Aug. 5, 2009).

⁸⁹ *Id.* at 39152.

⁹⁰ *Id.* at 39151; *U.S. Environmental Protection Agency Labeling of Hearing Protection Devices: Nonrulemaking Docket*, REGULATIONS.GOV, <https://www.regulations.gov/docket/EPA-HQ-OAR-2003-0024> (last visited Feb. 2, 2023).

⁹¹ NOISE CONTROL PROGRAM: PROGRESS TO DATE, *supra* note 23, at 21.

complete these studies or proceed to designate or regulate any other products as required by the Act.

Because of the EPA’s failure to carry out its responsibilities under Section 8 of the Act, consumers lack the information that Congress intended them to have for assessing the noise safety of the products they purchase. Take, as one example, the EPA’s failure to provide labeling information for noise-cancelling headphones. Furthermore, a 2015 report found that half of children as young as eight to twelve listened to music every day—yet many headphones marketed to parents as “volume limiting” expose children to harmful sound levels.⁹²

Not only are American consumers ill-informed and unwarned about the dangers of noisy devices, but product manufacturers also face increased exposure to liability because of the EPA’s abdication. For example, twenty-six consolidated class action cases were settled against multiple Bluetooth manufacturers for failure to warn consumers that the headsets could cause noise-induced hearing loss after only a few minutes of use per day.⁹³ Part of the settlement agreement required the defendant companies to “post acoustic safety information” on their websites and on their products.⁹⁴ This agreement would have been superfluous—as, indeed, would have been the entire action—if such headsets had been appropriately labeled.

Section 8 of the Noise Control Act requires the EPA to designate products and labeling regulations for products capable of emitting harmful levels of noise and products capable of reducing exposure to harmful levels of noise. The Agency has failed to do so for forty years in violation of its nondiscretionary duties. The examples provided here are a small subset of the consequences that flow from the Agency’s total failure in this regard.

E. EPA’S NONDISCRETIONARY DUTY TO REGULARLY CONSULT WITH APPROPRIATE FEDERAL AGENCIES AND REPORT ON THEIR NOISE CONTROL PROGRAMS

⁹² Catherine Saint Louis, *Children’s Headphones May Carry Risk of Hearing Loss*, N.Y. TIMES (Dec. 6, 2016), https://www.nytimes.com/2016/12/06/health/headphones-hearing-loss-kids.html?_r=0; see also Lauren K. Dillard, Malachi Ochieng Arunda, Lucero Lopez-Perez, Ricardo X. Martinez, Lucia Jimenez & Shelly Chadha, *Prevalence and Global Estimates of Unsafe Listening Practices in Adolescents and Young Adults: A Systematic Review and Meta-Analysis*, 7 BMJ GLOBAL HEALTH, no. 11, 2022, at 1 (estimating in 2022 that more than one billion young people globally are at risk of hearing loss, including due to exposure to loud music through personal listening devices).

⁹³ *Jones v. GN Netcom, Inc. (In re Bluetooth Headset Prods. Liab. Litig.)*, 654 F.3d 935, 939 (9th Cir. 2011).

⁹⁴ *Id.*

Section 4 of the Noise Control Act (42 U.S.C. § 4903) directs all federal agencies to “carry out the programs within their control in such a manner as to further the policy declared in [the Act.]”⁹⁵ The EPA is specifically directed in Section 4(c) (42 U.S.C. § 4903(c)) to “coordinate the programs of all Federal agencies relating to noise research and noise control” and consult with other agencies on “prescribing standards or regulations respecting noise.”⁹⁶ As required in Section 4(c)(3) the EPA “shall compile and publish, from time to time, a report on the status and progress of Federal activities relating to noise control” on the basis of “regular consultation.”⁹⁷ For forty years, the EPA has failed in its ongoing and nondiscretionary duties to coordinate an interagency effort on noise control, to consult with other federal agencies on their noise control activities, and to compile and publish a report on the status and progress of those activities.

Federal agencies are multifaceted with regard to noise. Some agencies run programs that are a source of serious noise that should be mitigated by those agencies (e.g., the Department of Defense and the Department of Transportation). Other agencies are a potential source of information to the public about the adverse effects of noise (e.g., the Centers for Disease Control). Still others are in a position to issue regulations to control noise within the bounds of their jurisdiction (e.g., the Department of Interior can control noise on public lands and the Department of Labor can control occupational noise exposure). Through Section 4 of the Noise Control Act, Congress intended the EPA to play a consultative role. In carrying out that role, the EPA should have orchestrated the application of all of these authorities to provide a quieter and safer environment for everyone.

F. EPA’S NONDISCRETIONARY DUTY TO ASSIST STATE AND LOCAL GOVERNMENTS IN DEVELOPING EFFECTIVE NOISE CONTROL PROGRAMS

Section 14 of the Noise Control Act (42 U.S.C. § 4913) provides no fewer than twenty-one directives as to how the EPA is required to provide assistance to states, local governments, and regional planning agencies.⁹⁸ Providing this assistance is a mandatory duty. Congress directed that the EPA “shall” implement particular directives “through the use of grants,

⁹⁵ 42 U.S.C. § 4903(a).

⁹⁶ 42 U.S.C. § 4903(c).

⁹⁷ 42 U.S.C. § 4903(c)(3).

⁹⁸ 42 U.S.C. § 4913.

contracts, and direct Federal actions.”⁹⁹ The EPA has abdicated all efforts in this regard. In violation of Section 14’s mandates, the EPA has not engaged in any efforts to fulfill any of the Congressionally specified directives for the last forty years, which include:

“(a) develop and disseminate information and educational materials to all segments of the public on the public health and other effects of noise and the most effective means for noise control, through the use of materials for school curricula, volunteer organizations, radio and television programs, publication, and other means;

(b) conduct or finance research directly or with any public or private organization or any person on the effects, measurement, and control of noise, including but not limited to—

(1) investigation of the psychological and physiological effects of noise on humans and the effects of noise on domestic animals, wildlife, and property, and the determination of dose/response relationships suitable for use in decisionmaking, with special emphasis on the nonauditory effects of noise;

(2) investigation, development, and demonstration of noise control technology for products subject to possible regulation under sections 4905 and 4907 of this title and section 44715 of Title 49;

(3) investigation, development, and demonstration of monitoring equipment and other technology especially suited for use by State and local noise control programs;

(4) investigation of the economic impact of noise on property and human activities; and

(5) investigation and demonstration of the use of economic incentives (including emission charges) in the control of noise;

(c) administer a nationwide Quiet Communities Program which shall include, but not be limited to—

(1) grants to States, local governments, and authorized regional planning agencies for the purpose of—

(A) identifying and determining the nature and extent of the noise problem within the subject jurisdiction;

(B) planning, developing, and establishing a noise control capacity in such jurisdiction, including purchasing initial equipment;

(C) developing abatement plans for areas around major transportation facilities (including airports, highways, and rail yards) and other major stationary sources of noise, and, where appropriate for the facility or source itself; and,

(D) evaluating techniques for controlling noise (including institutional arrangements) and demonstrating the best available techniques in such jurisdiction;

(2) purchase of monitoring and other equipment for loan to State and local noise control programs to meet special needs or assist in the beginning implementation of a noise control program or project;

(3) development and implementation of a quality assurance program for equipment monitoring procedures of State and local noise control programs to help communities assure that their data collection activities are accurate;

⁹⁹ 42 U.S.C. § 4913.

- (4) conduct of studies and demonstrations to determine the resource and personnel needs of States and local governments required for the establishment and implementation of effective noise abatement and control programs; and
- (5) development of education and training materials and programs, including national and regional workshops, to support State and local noise abatement and control programs; . . .

(d) develop and implement a national noise environmental assessment program to identify trends in noise exposure and response, ambient levels, and compliance data and to determine otherwise the effectiveness of noise abatement actions through the collection of physical, social, and human response data;

(e) establish regional technical assistance centers which use the capabilities of university and private organizations to assist State and local noise control programs;

(f) provide technical assistance to State and local governments to facilitate their development and enforcement of noise control, including direct onsite assistance of agency or other personnel with technical expertise, and preparation of model State or local legislation for noise control; and

(g) provide for the maximum use in programs assisted under this section of senior citizens and persons eligible for participation in programs under the Older Americans Act.”¹⁰⁰

Since 1982, local governments have not had support from the EPA in regulating harmful noise pollution despite the commands of this Quiet Communities Act. One can more easily understand the EPA’s failures in this regard if one considers what the EPA did before 1982 as an example of what it would look like to even try to fulfill responsibilities under Section 14. By 1981, 110 workshops attended by 4,000 noise control officials were conducted.¹⁰¹ The EPA established ten regional Technical Assistance Centers at local universities.¹⁰² Additionally, three Quiet Community Research and Demonstration cities (Allentown, PA; Spokane, WA; and Kansas City, MO) began a four-part effort to show how communities could form well-developed noise programs from the ground up.¹⁰³ Allentown was in the final stage of its program and Spokane and Kansas City were in the early stages of development when the EPA abandoned its noise programs.¹⁰⁴ Subsequently, these local efforts died and the Technical Assistance Centers

¹⁰⁰ 42 U.S.C. § 4913.

¹⁰¹ NOISE CONTROL PROGRAM: PROGRESS TO DATE, *supra* note 23, at 2.

¹⁰² *Id.* at 4.

¹⁰³ *Id.* at 3.

¹⁰⁴ *Id.*

disappeared even though, as explained in section A, the available scientific knowledge about the health impacts of noise has grown substantially.¹⁰⁵

The EPA's failure to assist state and local governments through the Quiet Communities Act since 1982 reaps downstream consequences for individuals suffering from harmful noise impacts in their communities. Because, for example, the EPA has failed to "develop and disseminate information and educational materials to all segments of the public" on the effects of noise,¹⁰⁶ develop "education and training materials and programs . . . to support State and local noise abatement and control programs,"¹⁰⁷ or establish regional technical assistant centers,¹⁰⁸ individuals harmed by noise, after asking repeatedly and futilely for help from their local communities and governments, found their way to QCi. Several of these QCi members shared their experiences of forced advocacy, not having been interested in or having had any experience with lobbying for noise control in their communities prior to experiencing various harms firsthand. These members have spent their time gathering information on the harms of noise when the EPA is mandated, through the Noise Control Act, to do just that. Moreover, these individuals have expended considerable energy advocating for noise pollution control. They have been left to convince their local governments of the harm caused by noise and face an uphill battle given that, unlike the EPA, they do not have inherent credibility in this area. In particular, these members have:

- Spent countless hours researching safe levels of noise as well as the cause and resulting harms of noise in their communities;
- Gathered data, scientific evidence, and information on legislative action from communities across the nation to share with their own local governments in attempts to stimulate change;
- Drafted and lobbied for adoption of or amendments to their local noise ordinances to no avail;
- Petitioned their local governments for action;
- Heard repeatedly from local law enforcement and local government leaders that there are no laws in place to regulate the noise harm they are experiencing;
- Been told by government officials, businesses, and neighbors that noise does not cause the harms they claim, despite ample scientific evidence to the contrary;
- Paid for local newspaper ads to educate their communities on safe levels of noise and best practices;

¹⁰⁵ See, e.g., SHAPIRO, *supra* note 51, at 17 & nn.164–166 (describing the decline in state and local noise programs after ONAC was abolished).

¹⁰⁶ 42 U.S.C. § 4913(a).

¹⁰⁷ 42 U.S.C. § 4913(c)(5).

¹⁰⁸ 42 U.S.C. § 4913(e).

- Paid for childcare so they could sit in city council or environmental board meetings for up to four hours at a time;
- Faced bullying by neighbors and local businesses in response to their efforts to reduce noise in their communities;
- Engaged local media and pro bono legal services for help;
- Started their own community organizations;
- Tabled at community events;
- Spoken at town halls; and
- Written many letters, as well as published various articles and blogs.

As is evident, these members bear the total burden of advocating for noise control when in fact the EPA’s leadership in this area and fulfillment of its duties under Section 14 of the Noise Control Act would have laid foundational groundwork and assisted them in their efforts.

G. BY FAILING TO CARRY OUT ITS DUTIES UNDER THE NOISE CONTROL ACT, EPA PERPETUATES ENVIRONMENTAL INJUSTICE IN VIOLATION OF EXECUTIVE ORDER 14008 AND THE AGENCY’S OWN PRINCIPLES

On January 27, 2021, President Joe Biden signed Executive Order (“EO”) 14008, “launching the most ambitious environmental justice agenda ever undertaken by the Federal Government”¹⁰⁹ and ordering all federal agencies, including the EPA, to “deliver environmental justice.”¹¹⁰ EO 14008 established several environmental justice initiatives, including the White House Environmental Justice Interagency Council, the White House Environmental Justice Advisory Council, the Justice40 Initiative, the development of a Climate and Economic Justice Screening Tool, and the establishment of an Environmental Justice Scorecard to track federal agency performance on environmental justice.¹¹¹ EO 14008 represents the Biden-Harris Administration’s “focus[] on addressing the long-standing disproportionate environmental harm on communities through a whole-of-government approach.”¹¹² Accordingly, the EPA is under a directive from President Biden to prioritize environmental justice.

Additionally, on March 28, 2022, the EPA published its final *Fiscal Year (FY) 2022–2026 EPA Strategic Plan*, which “provides a roadmap to achieve EPA’s and the Biden-Harris

¹⁰⁹ *Environmental Justice*, WHITE HOUSE, <https://www.whitehouse.gov/environmentaljustice/> (last visited Feb. 3, 2023).

¹¹⁰ *Exec. Order 14,008 on Tackling the Climate Crisis at Home and Abroad*, WHITE HOUSE (Jan. 27, 2021), <https://www.whitehouse.gov/environmentaljustice/>.

¹¹¹ *Environmental Justice*, *supra* note 109.

¹¹² *Environmental Justice (EJ)*, DEP’T OF LABOR, <https://www.dol.gov/agencies/oasp/resources/environmental-justice> (last visited Feb. 3, 2023).

Administration's environmental priorities over the next four years.”¹¹³ This *Strategic Plan* similarly emphasizes environmental justice as a priority for the Agency, adding to the Agency's foundational principles a new, fourth principle to “advance justice and equity.”¹¹⁴

This Administration insists that it is now working hard to correct years of inadequate attention to environmental justice issues. If that is the case, one would expect this Administration to begin to correct four decades of ignoring nondiscretionary responsibilities to control the impacts of noise on vulnerable communities. There is no clearer case of vulnerable communities being forced to suffer serious health effects over many years, not because of poorly written statutes or failure of the EPA to understand the consequences of its actions, but because of decisions by the EPA, year after year, to ignore mandatory provisions of a clear and standing statute.

National and local studies show that noise—ranging from road, rail, and air traffic to construction and industrial sources—has disparate impacts on low-income, marginalized, and environmental justice (“EJ”) communities, predisposing them to poorer health and learning outcomes.¹¹⁵ This knowledge about the impact on vulnerable populations is not new. A planned study on the effects of noise on low-income school children was terminated when President Reagan chose not to provide funding for noise control mandates.¹¹⁶ In 2017, Joan Casey, Peter James, and colleagues found that noise exposure levels were higher in low-income communities and communities with a large proportion of nonwhite residents.¹¹⁷ While speaking to the *Los Angeles Times* in late 2022, James noted that “[w]e’ve made these conscious or subconscious decisions as a society to put minority-race communities and lower-income communities who have the least amount of political power in areas near highways and airports.”¹¹⁸

¹¹³ FY 2022–2026 EPA STRATEGIC PLAN, *supra* note 7, at 5; *EPA Releases Final Strategic Plan to Protect Public Health, Address Climate Change, and Advance Environmental Justice and Equity*, U.S. ENV’T PROT. AGENCY (Mar. 28, 2022) [hereinafter *EPA Releases Final Strategic Plan*], <https://www.epa.gov/newsreleases/epa-releases-final-strategic-plan-protect-public-health-address-climate-change-and>.

¹¹⁴ FY 2022–2026 EPA STRATEGIC PLAN, *supra* note 7, at 5; *EPA Releases Final Strategic Plan*, *supra* note 113.

¹¹⁵ Joan A. Casey, Rachel Morello-Frosch, Daniel J. Mennitt, Kurt Fristrup, Elizabeth L. Ogburn & Peter James, *Race/Ethnicity, Socioeconomic Status, Residential Segregation, and Spatial Variation in Noise Exposure in the Contiguous United States*, 125 ENV’T HEALTH PERSPS., no. 7, 2017; Timothy W. Collins, Shawna Nadybal & Sara E. Grineski, *Sonic Injustice: Disparate Residential Exposures to Transport Noise from Road and Aviation Sources in the Continental United States*, 82 J. TRANSP. GEOGRAPHY 102604 (2020).

¹¹⁶ *See, e.g.*, CHILDS. DEF. FUND, A CHILDREN’S DEFENSE BUDGET: AN ANALYSIS OF THE PRESIDENT’S BUDGET AND CHILDREN 10–13, 27–35, 103–23, 144–49 (1982) (describing how the Reagan Administration’s funding cuts and “administrative dismantlement” hurt low-income children and students).

¹¹⁷ Casey et al., *supra* note 115.

¹¹⁸ Bluth, *supra* note 27.

The mental and physical health harms that EJ communities suffer as a result of excessive and disproportionate exposure to noise is one thing—on its own that harm is enough of a reason for the EPA to take action. But the need for action is even more clear when the health impacts from noise are considered in a broader context of cumulative impacts to EJ communities from chemical and non-chemical stressors. That is, noise is not the only health stressor that disproportionately impacts EJ communities. It is well-understood that EJ communities suffer from disproportionate exposure to air pollution, Superfund sites, highway traffic, etc.¹¹⁹ It is also well-understood that health risks are cumulative. In fact, the EPA recently published a report entitled *Cumulative Impacts Research: Recommendations for EPA’s Office of Research and Development*, to define cumulative impacts and explain how cumulative impacts are a critical part of understanding and solving entrenched patterns of community health problems.¹²⁰ One need not move beyond the EPA website to find a declaration that “[t]his research is essential to solving longstanding environmental health problems, including health disparities exacerbated by racial and social injustices. These issues can benefit from an accurate and realistic assessment of the effects from the combined exposures to inform decision-making at all levels, across communities.”¹²¹ Indeed, the report’s introduction states in no uncertain terms that “[f]or EPA to fulfill its mission to protect human health and the environment, the Agency needs to address the

In addition to impacts on EJ communities, the EPA’s failure to carry out its duties under the Noise Control Act has disproportionately impacted other vulnerable groups—such as infants and children as well as people with autism, sensory deficit disorders, hearing damage, other preexisting health conditions, and post-traumatic stress—who tend to be more sensitive to noise and experience greater physical and mental distress. Irene Van Kamp & Hugh Davies, *Noise and Health in Vulnerable Groups: A Review*, 15 NOISE & HEALTH, May–June 2013, at 153; Marieke W. M. Kuiper, Elisabeth W. M. Verhoeven & Hilde M. Geurts, *Stop Making Noise! Auditory Sensitivity in Adults with Autism Spectrum Disorder Diagnosis: Physiological Habituation and Subjective Detection Thresholds*, 49 J. AUTISM & DEVELOPMENTAL DISORDERS 2,116 (2019); Megan L. Callahan & Miranda M. Lim, *Sensory Sensitivity in TBI: Implications for Chronic Disability*, 18 CURRENT NEUROLOGY & NEUROSCIENCE REPS. 55 (2018); *Noise as a Public Health Hazard*, *supra* note 33.

¹¹⁹ U.S. ENV’T PROT. AGENCY, E.O. 13985 EQUITY ACTION PLAN 3 (2022) (“Scientific research consistently and increasingly demonstrates that the disproportionate levels of pollution experienced by communities with environmental justice concerns result in adverse health outcome disparities directly associated with these exposures.” (citing Rachel Morello-Frosch, Miriam Zuk, Michael Jerrett, Bhavna Shamasunder & Amy D. Kyle, *Understanding the Cumulative Impacts of Inequalities in Environmental Health: Implications for Policy*, 30 HEALTH AFFS., no. 5, 2011, at 879–87; STEVE LERNER, SACRIFICE ZONES: THE FRONT LINES OF TOXIC CHEMICAL EXPOSURE IN THE UNITED STATES (2010))).

¹²⁰ U.S. ENV’T PROT. AGENCY, CUMULATIVE IMPACTS RESEARCH: RECOMMENDATIONS FOR EPA’S OFFICE OF RESEARCH AND DEVELOPMENT 3–11 (2022) [hereinafter EPA CUMULATIVE IMPACTS RESEARCH].

¹²¹ *EPA Researchers Release Cumulative Impacts Report, Prioritizing Environmental Justice in New Research Cycle*, U.S. ENV’T PROT. AGENCY (Oct. 11, 2022), <https://www.epa.gov/sciencematters/epa-researchers-release-cumulative-impacts-report-prioritizing-environmental-justice>.

cumulative impacts of exposure to multiple chemical and non-chemical stressors using the best available science.”¹²² The EPA specifically recognizes noise as a relevant non-chemical stressor.¹²³ All of which is to say that fulfilling the EPA’s mandates under the Noise Control Act and taking seriously Congressional commands to treat noise pollution as a public health concern is a critical component to reducing health burdens in EJ communities—as a standalone issue and as a matter of reducing cumulative impacts. To that end, the EPA can hardly do its work in characterizing risk as part of a cumulative impacts assessment in EJ communities (or any community) without understanding the serious health implications of noise.

Several QCi members live in EJ communities¹²⁴ that experience disproportionate harm from noise pollution. Liz and Dave Williams live in the small town of Independence, Louisiana, in Tangipahoa Parish. Dave and Liz’s home has been in Dave’s family for over one hundred years. A landfill has operated on their small street since the early 1980s, and, in 2019, a gravel pit opened next to the landfill. Since then, daily life in this low-income, primarily Black, residential community is dominated by noise from speeding and jake-braking 18-wheelers, other heavy haulers, and the metallic rattle of the rocks and sand they carry. The heaviest truck traffic occurs between the hours of 2:00 AM and 6:00 AM, at which point nightly noise from the gravel pit and its traffic turns into morning noise from garbage trucks going to and from the landfill. Liz and ninety-two others from the community sought help from the Parish Council to no avail. The Williamses’ pleas to local law enforcement, truck drivers, the owners of the gravel pit, and several local, state, and federal government agencies have also gone unanswered. The Williamses and their neighbors experience severe sleep disruption, harm to their homes, anxiety, fear, depression, frustration, stress, impacts to their heart health, the loss of their time and money fighting for relief from noise pollution, and harms from other pollution and the destruction of community land caused by the gravel trucks, gravel pit, and landfill.

Jerry Leonard is a resident of Melrose Place, a low-income, predominantly Black community in East Baton Rouge Parish, Louisiana. Melrose Place is a small, residential

¹²² EPA CUMULATIVE IMPACTS RESEARCH, *supra* note 120, at 1.

¹²³ *Id.* at 1 n.2.

¹²⁴ Identified as such by the Federal Government’s Climate and Economic Justice Screening Tool and EJScreen 2.1. *EJScreen: EPA’s Environmental Justice Screening and Mapping Tool (Version 2.1)*, U.S. ENV’T PROT. AGENCY, <https://ejscreen.epa.gov/mapper/index.html?wherestr=153+W+7th+St%2C+Independence%2C+LA+70443> (last visited Feb. 3, 2023); *Climate and Economic Justice Screening Tool*, COUNCIL ON ENV’T QUALITY, <https://screeningtool.geoplatform.gov/en/#18.34/30.593581/-90.425068> (last updated Nov. 22, 2022).

development. An industrial printing facility is located behind the community. In 2019, Jerry and his neighbors began experiencing excessive noise pollution from the facility, caused by the facility's industrial HVAC system, hydraulic trash compactor, industrial alarm system, and other industrial noise. Noise from the facility has disrupted residents' sleep causing some residents to sleep with ear plugs, caused anxiety and stress leading to the need for medical care and prescription medications, upended study time, and interfered with use of residents' property. Jerry and his neighbors have contacted the facility, local authorities, local government officials and politicians, their homeowner's association, local news outlets who reported on their story, and engaged the Tulane Law School Environmental Law Clinic for help. The community has also reported concerns regarding fumes from the printing plant.

Tracy Williams lives in Camp Hill, Alabama, a small, rural town that is also predominately Black and low-income. In 2015, air traffic from a variety of airplanes and aerial sources began causing excessive noise in and near her community. As a result, Tracy began diligently and regularly tracking and documenting the flight activity within hearing distance of her home. At least 100–150 flights per day, on average more than 1,000 per week, pass over and near her community spanning 24 hours a day. “We constantly hear various small engine planes, including those from a flight school conducting training exercises day and night, and from commercial and private jets, cargo planes, military aircraft, helicopters, and more. The noise is loud, constant, and repetitive, penetrating through our walls and windows. There is roaring and rumbling, whirling and high-pitched whining, vibrating, and droning.” As a result, she says she and her husband have experienced chronic stress, anxiety, depression, and interrupted sleep leading to serious health effects including high blood pressure, panic attacks, ringing in the ears, respiratory issues, and breathing difficulty. During the COVID-19 Pandemic, her daughter, who had to participate in school from home, had difficulty concentrating. Tracy says her family feels “hopeless, helpless, unable to enjoy our home and property, and fearful of further harassment or retaliation from efforts to raise awareness and seek help.” Tracy has written countless letters and made phone calls to local, state, and federal officials, but the response rate is low and no one has offered help.

In an attempt to bring these noise-related environmental injustices to the attention of the Agency and others, QCi addressed the EPA's National Environmental Justice Advisory Council and White House Environmental Justice Advisory Council regarding the hazards of noise and its

disparate impacts on EJ communities.¹²⁵ There, QCi highlighted the importance of including noise as an environmental indicator in EJScreen 2.0 and in other environmental and health impact assessment tools, pointing to the need to minimize the noise-related impacts of infrastructure, housing, and other projects and policies.¹²⁶ Despite these efforts, the EPA has not included noise as a criterion in EJScreen 2.0.¹²⁷ Through the new major infrastructure funding available to states, EJ communities are likely to be impacted even more by noise from the resulting onslaught of projects.¹²⁸ Failing to include noise as a criterion in its environmental justice program exposes EJ communities to unnecessary and preventable harm to health, learning, and well-being, in contravention of EO 14008's directive.

The EPA's failure to recognize noise as a criterion in its EJ screening tools underscores the types of decisions that could have been different if the EPA had given public health impacts from noise the attention that Congress intended over the last fifty years. But because the EPA has ignored its responsibilities under the Noise Control Act for a half-century, the EPA has resigned itself to making decisions regarding noise with less information than would have existed if the EPA had simply followed the law.

More specifically, as this notice letter describes, the EPA is responsible for identifying unsafe levels of noise pollution to which people should not be exposed and disseminating such information;¹²⁹ investigating specific technologies to control sources of noise;¹³⁰ providing extensive informational, technical, and financial assistance to state and local governments;¹³¹ coordinating federal agency efforts involving noise;¹³² promulgating product regulations to control products' noise emissions;¹³³ designating labeling requirements so that the public can

¹²⁵ See *infra* App. E.

¹²⁶ *Id.*

¹²⁷ *EJScreen: EPA's Environmental Justice Screening and Mapping Tool (Version 2.1)*, *supra* note 124.

¹²⁸ *Biden-Harris Administration Sending States Nearly \$60 Billion from the Bipartisan Infrastructure Law for America's Roads and Bridges*, U.S. DEP'T TRANSP. (Oct. 11, 2022), <https://highways.dot.gov/newsroom/biden-harris-administration-sending-states-nearly-60-billion-bipartisan-infrastructure-law>; *Latest Updates on Infrastructure Funding*, U.S. CHAMBER COM. (May 16, 2022), <https://www.uschamber.com/infrastructure/latest-updates-on-infrastructure-funding>; *Fact Sheet: One Year into Implementation of Bipartisan Infrastructure Law, Biden-Harris Administration Celebrates Major Progress in Building a Better America*, WHITE HOUSE (Nov. 15, 2022), <https://www.whitehouse.gov/briefing-room/statements-releases/2022/11/15/fact-sheet-one-year-into-implementation-of-bipartisan-infrastructure-law-biden-%E2%81%A0harris-administration-celebrates-major-progress-in-building-a-better-america/>.

¹²⁹ 42 U.S.C. § 4904; see *supra* sections A, B.

¹³⁰ 42 U.S.C. §§ 4904, 4905; see *supra* section B.

¹³¹ 42 U.S.C. § 4913; see *supra* section F.

¹³² 42 U.S.C. § 4903; see *supra* section E.

¹³³ 42 U.S.C. § 4905; see *supra* section B.

protect themselves;¹³⁴ certifying low-noise-emission products for federal agency purchase;¹³⁵ and enforcing the Noise Control Act against violations.¹³⁶ If the EPA had fulfilled these duties under the Noise Control Act over the last forty years, EJ communities—which suffer from noise impacts in conjunction with the disproportionate burdens of other traditionally recognized forms of pollution—would be in a better position to advocate for change and would likely live in quieter communities today. The EPA also would be in a better position to make informed decisions about how noise fits into the profile of chemical and non-chemical stressors that increase the burden of disease in EJ communities.

CONCLUSION AND OFFER TO COLLABORATE

Claimants have before tried to engage the EPA at various levels—from the Administrator to the Assistant Administrator, staff, and Advisory Councils—on the need to regulate noise:

- In April of 2017, our organization submitted a petition to the EPA to reimplement the Noise Control Act.¹³⁷ In the intervening five years, we have received no response from the Agency.
- In October 2021, we met with Alejandra Nunez, Deputy Assistant Administrator for Mobile Sources, Office of Air and Radiation (OAR), and other staff to bring our concerns to the attention of the senior leadership of OAR where, until 1982, the Noise Control Program was organizationally housed. Attendees included a representative of the Office of General Counsel.
- A subsequent meeting was held in February 2022 with Joseph Goffman, Principal Deputy Assistant Administrator for OAR, and staff to discuss these matters further. While Mr. Goffman expressed sympathy with our concerns, he made no commitments to reinstating the noise control program.

To date, we have had no indication of the EPA’s intended actions or response, if any, to these serious issues.

Because the EPA has declined to respond to our steadfast efforts, we send this notice to provide information sufficient for you to determine that you have failed to perform nondiscretionary duties. Accordingly, please take notice that after expiration of sixty (60) days from the postmark date of this notice of intent to sue, as per 42 U.S.C. § 4911(b)(2), Claimants

¹³⁴ 42 U.S.C. § 4907, *see supra* section D.

¹³⁵ 42 U.S.C. § 4914, *see supra* section C.

¹³⁶ 42 U.S.C. § 4910.

¹³⁷ QUIET COMMUNITIES, PETITION TO THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (2017), https://quietcommunities.org/wp-content/uploads/2021/03/QuietCommunitiesPetitiontoEPA_Final_041917.pdf.

intend to file suit against you in accordance with 42 U.S.C. § 4911(a)(2)(A) in federal court for your failure to perform acts and duties under the Noise Control Act, 42 U.S.C. §§ 4901–4918, as outlined above. Claimants intend to seek all appropriate relief, including attorneys’ fees, expert witness fees, and other reasonable costs.¹³⁸

While this notice letter provides more detail than required to provide adequate notice of intent to sue under 42 U.S.C. § 4911(b), Claimants have provided further context and explanation regarding noise pollution’s disproportionate harm to low-income and BIPOC communities, the significant growth in scientific evidence, and the serious public health impacts of noise pollution with the hope that the Agency will take this letter seriously and recognize that this is an important public health issue deserving of resources and attention from the EPA. Not only are the EPA’s violations of the Noise Control Act a failure of its legal obligations, but they are also antithetical to its mission to protect public health and the environment. The Agency is putting people directly at risk by withholding important scientific information and failing to put Americans on notice of the harms of excessive noise and the sources of harmful noise pollution. The Agency should thus recognize that fulfilling its duties under the Act and reestablishing the federal noise control program is a necessity.

Claimants hope that the Administrator and the Agency will see the error of the Agency’s past dereliction without the need for court intervention. Thus, we welcome the opportunity to sit down and collaborate on a path forward. If you have any questions, please feel free to contact our Counsel, whose contact information is provided below. We look forward to hearing from you and to the opportunity to work together on this important public health issue.

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¹³⁸ 42 U.S.C. § 4911(d).

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APPENDIX A: HISTORICAL OVERVIEW

The EPA Noise Program was formally established on December 31, 1970, under Title IV of the Clean Air Amendments of 1970.¹³⁹ Title IV directed the Agency to conduct a full and complete investigation and study of noise and its effect on public health and welfare and to report the findings to Congress within one year.¹⁴⁰ That report provided the information needed to support the first national noise control legislation in the United States,¹⁴¹ the Noise Control Act of 1972,¹⁴² which was signed by the President on October 27, 1972.¹⁴³ The Act mandated that the EPA identify sources of noise for regulation, promulgate noise emission standards, coordinate federal noise research and noise abatement, work with industry and international, state, and local regulators to develop consensus standards, disseminate information and educational materials, and sponsor research on the effects of noise and the methods by which it can be abated. In 1978, Congress amended the Act when it passed the Quiet Communities Act,¹⁴⁴ directing the EPA to provide grants and support to state and local governments for noise abatement.

During the eight years following the enactment of the Noise Control Act, the Agency actively carried out the mandates of the Act, conducting research, publishing mandated documents, writing regulations, and helping local communities.¹⁴⁵ A report published in 1980 details the accomplishments of the EPA during this period.¹⁴⁶ However, after Ronald Reagan was inaugurated as President in January 1981, he appointed congressman David Stockman as the Director of his Office of Management and Budget. The Noise Control Act had been brought to Stockman's attention while he was serving as a congressman after a constituent of his complained that the constituent's company was being subjected to one of the regulations promulgated by the Agency under the Noise Control Act.¹⁴⁷ It is not a coincidence that within less than thirty days after the inauguration, Stockman directed that the Noise Control Act and its offices be defunded.¹⁴⁸ These offices included the Office of Noise Abatement and Control, the Noise Enforcement Division of the Office of Mobile Source and Noise Enforcement, and ten regional noise programs.¹⁴⁹ Mr. Stockman informed the Agency that this decision, which also helped to fulfill President Reagan's deregulatory campaign promises, was non-negotiable.¹⁵⁰

Congress then held hearings and heard industry witnesses who, while not objecting to the defunding of the program, still wanted the Act to continue in force in order to give them the preemption protection the Act provided against state and local regulations of their industries' activities.¹⁵¹ Congress did not repeal the Act. Despite the EPA's failure for more than four

¹³⁹ NOISE CONTROL PROGRAM: PROGRESS TO DATE, *supra* note 23, at v.

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² 42 U.S.C. §§ 4901–4918.

¹⁴³ Noise Control Act of 1972, Pub. L. No. 92-574, 86 Stat. 1234.

¹⁴⁴ 42 U.S.C. § 4913.

¹⁴⁵ NOISE CONTROL PROGRAM: PROGRESS TO DATE, *supra* note 23.

¹⁴⁶ *Id.* at v; *see infra* App. F.

¹⁴⁷ Telephone Interview by Jamie L. Banks with Chuck Elkins, former director of the Office of Noise Abatement and Control (Mar. 15, 2023).

¹⁴⁸ *Id.*

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

¹⁵¹ *Lessons from a Public Policy Failure*, *supra* note 51, at 1, 20.

decades to carry out any of its many mandatory duties prescribed by the Act, the Act, the
preemption, and many regulations promulgated under the Act remain in force today.

APPENDIX B: EXAMPLES OF SCIENTIFIC PUBLICATIONS ON THE HEALTH EFFECTS OF NOISE, 1982–2022

On July 15, 2022, we conducted a search of the PubMed database at the National Library of Medicine to identify scientific, peer-reviewed publications on noise and health published between 1982, when the EPA abandoned its duties under the Noise Control Act, and the present. The search used “noise” as a title term; “health” or “adverse” as a title or abstract term; and excluded publications that had “signal” or “ratio” in the title or abstract to minimize articles addressing statistical rather than acoustical noise.

The search yielded approximately 1,850 relevant publications. The full search results are available [here](#). Examples are listed below by topic.

Cardiovascular and Metabolic Health and Mortality

- Zaman M, Muslim M, Jehangir A. Environmental noise-induced cardiovascular, metabolic and mental health disorders: a brief review. Environ Sci Pollut Res Int. 2022 Aug 5. doi: 10.1007/s11356-022-22351-y. Epub ahead of print. PMID: 35931843.
- Hahad O, Daiber A, Münzel T. Reduced Aircraft Noise Pollution During COVID-19 Lockdown Is Beneficial to Public Cardiovascular Health: a Perspective on the Reduction of Transportation-Associated Pollution. Hypertension. 2022 Feb;79(2):335-337. doi: 10.1161/HYPERTENSIONAHA.121.18607. Epub 2021 Dec 6. PMID: 34865503.
- Münzel T, Steven S, Hahad O, Daiber A. Noise and cardiovascular risk: nighttime aircraft noise acutely triggers cardiovascular death. Eur Heart J. 2021 Feb 21;42(8):844-846. doi: 10.1093/eurheartj/ehaa984. PMID: 33367707; PMCID: PMC7898943.
- Osborne MT, Radfar A, Hassan MZO, Abohashem S, Oberfeld B, Patrich T, Tung B, Wang Y, Ishai A, Scott JA, Shin LM, Fayad ZA, Koenen KC, Rajagopalan S, Pitman RK, Tawakol A. A neurobiological mechanism linking transportation noise to cardiovascular disease in humans. Eur Heart J. 2020 Feb 1;41(6):772-782. doi: 10.1093/eurheartj/ehz820. PMID: 31769799; PMCID: PMC7006229.
- Halonen JI. Transportation noise and cardiovascular health: role of multiple noise sources. Occup Environ Med. 2019 Apr;76(4):199-200. doi:10.1136/oemed-2018-105657. PMID: 30872382.
- Münzel T, Schmidt FP, Steven S, Herzog J, Daiber A, Sørensen M. Environmental Noise and the Cardiovascular System. J Am Coll Cardiol. 2018 Feb 13;71(6):688-697. doi: 10.1016/j.jacc.2017.12.015. PMID: 29420965.

Cerebral/Mental/Neurological Health

- Hahad O, Bayo Jimenez MT, Kuntic M, Frenis K, Steven S, Daiber A, Münzel T. Cerebral consequences of environmental noise exposure. Environ Int. 2022 Jul;165:107306. doi: 10.1016/j.envint.2022.107306. Epub 2022 May 20. PMID: 35635962.
- Arjunan A, Rajan R. Noise and brain. Physiol Behav. 2020 Dec 1;227:113136. doi: 10.1016/j.physbeh.2020.113136. Epub 2020 Aug 14. PMID: 32798569.

- Mucci N, Traversini V, Lorini C, De Sio S, Galea RP, Bonaccorsi G, Arcangeli G. Urban Noise and Psychological Distress: A Systematic Review. *Int J Environ Res Public Health*. 2020 Sep 11;17(18):6621. doi: 10.3390/ijerph17186621. PMID: 32932901; PMCID: PMC7560223.
- Baudin C, Lefèvre M, Champelovier P, Lambert J, Laumon B, Evrard AS. Aircraft Noise and Psychological Ill-Health: The Results of a Cross-Sectional Study in France. *Int J Environ Res Public Health*. 2018 Aug 3;15(8):1642. doi: 10.3390/ijerph15081642. PMID: 30081458; PMCID: PMC6121613.

Sleep Disturbance

- Smith MG, Cordoza M, Basner M. Environmental Noise and Effects on Sleep: An Update to the WHO Systematic Review and Meta-Analysis. *Environ Health Perspect*. 2022 Jul;130(7):76001. doi: 10.1289/EHP10197. Epub 2022 Jul 11. PMID: 35857401; PMCID: PMC9272916.
- van Kamp I, Simon S, Notley H, Baliatsas C, van Kempen E. Evidence Relating to Environmental Noise Exposure and Annoyance, Sleep Disturbance, Cardio-Vascular and Metabolic Health Outcomes in the Context of IGCB (N): A Scoping Review of New Evidence. *Int J Environ Res Public Health*. 2020 Apr 26;17(9):3016. doi: 10.3390/ijerph17093016. PMID: 32357581; PMCID: PMC7246943.
- Muzet A. Environmental noise, sleep and health. *Sleep Med Rev*. 2007 Apr;11(2):135-42. doi: 10.1016/j.smrv.2006.09.001. Epub 2007 Feb 20. PMID:17317241.

Economic

- Swinburn TK, Hammer MS, Neitzel RL. Valuing Quiet: An Economic Assessment of U.S. Environmental Noise as a Cardiovascular Health Hazard. *Am J Prev Med*. 2015 Sep;49(3):345-53. doi: 10.1016/j.amepre.2015.02.016. Epub 2015 May 26. PMID: 26024562; PMCID: PMC4819987.
- Correia AW, Peters JL, Levy JI, Melly S, Dominici F. Residential exposure to aircraft noise and hospital admissions for cardiovascular diseases: multi-airport retrospective study. *BMJ*. 2013 Oct 8;347:f5561. doi: 10.1136/bmj.f5561. PMID: 24103538; PMCID: PMC3805481.

Infant and Child Health

- Hong SA, Kuziez D, Das N, Harris D, Brunworth JD. Hazardous sound outputs of white noise devices intended for infants. *Int J Pediatr Otorhinolaryngol*. 2021 Jul;146:110757. doi: 10.1016/j.ijporl.2021.110757. Epub 2021 May 11. PMID:33992973.
- Erickson LC, Newman RS. Influences of background noise on infants and children. *Curr Dir Psychol Sci*. 2017;26(5):451-457. doi:10.1177/0963721417709087. Epub 2017 Oct 10. PMID: 29375201; PMCID: PMC5784839.
- Stansfeld S, Clark C. Health Effects of Noise Exposure in Children. *Curr Environ Health Rep*. 2015 Jun;2(2):171-8. doi: 10.1007/s40572-015-0044-1. PMID: 26231366.

- Evans GW, Lercher P, Meis M, Ising H, Kofler WW. Community noise exposure and stress in children. J Acoust Soc Am. 2001 Mar;109(3):1023-7. doi:10.1121/1.1340642. PMID: 11303916.
- Haines MM, Stansfeld SA, Job RF, Berglund B, Head J. Chronic aircraft noise exposure, stress responses, mental health and cognitive performance in school children. Psychol Med. 2001 Feb;31(2):265-77. doi: 10.1017/s0033291701003282. PMID: 11232914.

General

- Basner M, Babisch W, Davis A, Brink M, Clark C, Janssen S, Stansfeld S. Auditory and non-auditory effects of noise on health. Lancet. 2014 Apr 12;383(9925):1325-1332. doi: 10.1016/S0140-6736(13)61613-X. Epub 2013 Oct 30. PMID: 24183105; PMCID: PMC3988259.
- Goines L, Hagler L. Noise pollution: a modern plague. South Med J. 2007 Mar;100(3):287-94. doi: 10.1097/smj.0b013e3180318be5. PMID: 17396733.
- Bronzaft AL. Noise: combating a ubiquitous and hazardous pollutant. Noise Health. 2000;2(6):1-8. PMID: 12689475.
- Passchier-Vermeer W, Passchier WF. Noise exposure and public health. Environ Health Perspect. 2000 Mar;108 Suppl 1(Suppl 1):123-31. doi:10.1289/ehp.00108s1123. PMID: 10698728; PMCID: PMC1637786.

APPENDIX C: EXCERPT FROM 2021 APHA POLICY STATEMENT: *NOISE AS A PUBLIC HEALTH HAZARD*¹⁵²

Decades of scientific evidence show that noise causes or contributes to hearing loss (noise-induced hearing loss [NIHL]), annoyance, sleep disruption, cardiovascular disease, metabolic disturbances, and exacerbation of anxiety and depression. It also has adverse impacts on communication, activities, learning, productivity, and quality of life. The health of more than 100 million Americans is estimated to be at risk.

Hearing loss is the third most common chronic physical condition in the United States, with a prevalence twice that of diabetes or cancer. Approximately 5.2 million children (6–19 years of age) and 26 million adults (20–69 years of age) have hearing damage from excessive noise exposure (i.e., NIHL). In addition to the physical and mental health effects, the costs of hearing loss are considerable. Untreated hearing loss has been shown to increase health care costs by 46%, the incidence of inpatient stays by 47%, and the likelihood of 30-day hospital readmission by 44% over a 10-year period. These findings may be related to consequences that include higher risks of falls, depression, cognitive decline, and dementia. Work productivity losses due to hearing loss are estimated in the hundreds of billions of dollars per year.

Approximately 145 million Americans are at risk of noise-related hypertension, thus increasing the risk of noise-related ischemic heart disease, stroke, and related mortality. Noise-related effects on non-auditory health add considerably to the health and economic burden of noise. In Europe, the loss of disability-adjusted life-years attributable to environmental noise is 61,000 from ischemic heart disease, 45,000 from children’s cognitive impairment, 903,000 from sleep disturbance, 22,000 from tinnitus, and 587,000 from annoyance.

A full accounting of noise-related health costs in the United States does not exist, but studies suggest that those costs are considerable. Medical costs for treatment of hearing loss are estimated at \$3.3 billion to \$12.8 billion annually. Cost estimates of lost productivity due to hearing loss vary widely, from \$1.8 billion to \$194 billion annually. An analysis by Neitzel and colleagues suggests that those costs may be higher; the authors found that preventing NIHL in just 20% of those potentially affected would save \$123 billion in productivity losses. When noise-related hypertension is considered, lowering environmental noise just 5 dB is estimated to reduce the prevalence of hypertension by 1.4% and the prevalence of coronary heart disease by 1.8%, resulting in medical cost savings of \$3.9 billion annually. The inclusion of other noise-related health effects, such as ischemic heart disease and mental health disturbances, would increase those cost estimates considerably.

¹⁵² *Noise as a Public Health Hazard*, *supra* note 33.

APPENDIX D: EXAMPLES OF SCIENTIFIC PUBLICATIONS ON THE EFFECTS OF ANTHROPOGENIC NOISE ON ECOSYSTEMS, 1995–2022

On August 19, 2022, we conducted a search of the PubMed database at the National Library of Medicine to identify scientific, peer-reviewed publications on anthropogenic noise and impacts on ecosystems published between 1982 and the present. The search used “anthropogenic noise” and “effects” as title/abstract terms.

The search yielded nearly 300 relevant publications. The full search results are available [here](#). No relevant publications were found to have been published before the year 2000. Some examples are provided below.

- Willems JS, Phillips JN, Francis CD. Artificial light at night and anthropogenic noise alter the foraging activity and structure of vertebrate communities. *Sci Total Environ*. 2022 Jan 20;805:150223. doi: 10.1016/j.scitotenv.2021.150223. Epub 2021 Sep 9.
- Reed VA, Toth CA, Wardle RN, Gomes DGE, Barber JR, Francis CD. Experimentally broadcast ocean surf and river noise alters birdsong. *PeerJ*. 2022 May 17;10:e13297. doi: 10.7717/peerj.13297.
- Classen-Rodríguez L, Tinghitella R, Fowler-Finn K. Anthropogenic noise affects insect and arachnid behavior, thus changing interactions within and between species. *Curr Opin Insect Sci*. 2021 Oct;47:142-153. doi: 10.1016/j.cois.2021.06.005
- Kunc HP, Schmidt R. The effects of anthropogenic noise on animals: a meta-analysis. *Biol Lett*. 2019 Nov 29;15(11):20190649. doi: 10.1098/rsbl.2019.0649. Epub 2019 Nov 20.
- Tennessen JB, Parks SE, Swierk L, Reinert LK, Holden WM, Rollins-Smith LA, Walsh KA, Langkilde T. Frogs adapt to physiologically costly anthropogenic noise. *Proc Biol Sci*. 2018 Nov 21;285(1891):20182194. doi: 10.1098/rspb.2018.2194.
- Francis CD, Newman P, Taff BD, White C, Monz CA, Levenhagen M, Petrelli AR, Abbott LC, Newton J, Burson S, Cooper CB, Fristrup KM, McClure CJW, Mennitt D, Giamellaro M, Barber JR. Acoustic environments matter: Synergistic benefits to humans and ecological communities. *J Environ Manage*. 2017 Dec 1;203(Pt 1):245-254. doi: 10.1016/j.jenvman.2017.07.041.
- Kleist NJ, Guralnick RP, Cruz A, Lowry CA, Francis CD. Chronic anthropogenic noise disrupts glucocorticoid signaling and has multiple effects on fitness in an avian community. *Proc Natl Acad Sci U S A*. 2018 Jan 23;115(4):E648-E657. doi: 10.1073/pnas.1709200115.
- Simpson SD, Radford AN, Nedelec SL, Ferrari MC, Chivers DP, McCormick MI, Meekan MG. Anthropogenic noise increases fish mortality by predation. *Nat Commun*. 2016 Feb 5;7:10544. doi: 10.1038/ncomms10544.
- Sabet SS, Neo YY, Slabbekoorn H. Impact of Anthropogenic Noise on Aquatic Animals: From Single Species to Community-Level Effects. *Adv Exp Med Biol*. 2016;875:957-61. doi: 10.1007/978-1-4939-2981-8_118. PMID: 26611055.

APPENDIX E: EXAMPLES OF ORAL STATEMENTS SUBMITTED TO NEJAC AND WEJAC



Statement to the National Environmental Justice Advisory Council (NEJAC)

April 20, 2022 Meeting

We are the President and Chair of the Legal Advisory Council of Quiet Communities – a national nonprofit organization working to reduce health and environmental harms from noise and related pollution. We are writing to reiterate a message we brought to this body before (month of that first meeting): that environmental noise has serious public health impacts, that they fall disproportionately on EJ communities, and that there is ongoing neglect of the problem.

As Deputy Administrator Janet McCabe stated during her presentation at the April 20th NEJAC meeting, the EPA operates on 4 principals:

- Following the law
- Following the science
- Acting with transparency
- Advancing justice and equity

These are the organizing principals for our statement below.

Following the Law

Noise was first recognized as a public health hazard in 1968 by US Surgeon General William Stewart, noting its negative effects not only on hearing but on cardiovascular and metabolic health. The [Clean Air Act of 1970](#) recognized noise as a form of pollution and called on EPA to form the Office of Noise Abatement and Control (ONAC). The [Noise Control Act of 1972](#) (NCA) and [Quiet Communities Act of 1978](#) tasked ONAC with regulation, enforcement, education, product labelling, and technical assistance. Those laws are still in effect today. But they have little protective effect because funding for ONAC was eliminated by the Reagan Administration in 1981.

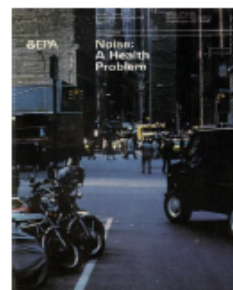
During its 10-year tenure, [ONAC accomplished a lot](#). Regulations were developed for noisy vehicles and equipment, hundreds of publications were produced to educate and inform industry and the public, technical assistance was provided to states to help them protect public health from the adverse effects of noise. The United States was a global leader.

After ONAC was defunded, activity ceased. Noise disappeared from the national agenda. We live in a noisier world in which everyday noise exposure is threatening the health of [more than 100 million Americans](#), with children among the most vulnerable and EJ communities affected disproportionately. The US is no longer a leader. Instead, other countries have taken the lead.

The EPA should find way to carry out its legally mandated responsibilities. The American Public Health Association's (APHA) recent policy statement, [Noise as a Public Health Hazard](#), calls on the Federal Government and EPA to:

- Ensure that reduction of noise exposures is part of all environmental and health efforts;
- Acknowledge the disparate impacts of noise on communities of color and low-income communities;
- Re-activate the federal noise control program as mandated by law;
- Coordinate with NEJAC to address environmental justice issues around noise.

A small budget would go a long way to getting things started again.



"[Noise] constitutes a real and present danger to people's health."
Noise: A Health Problem, US EPA, 1978

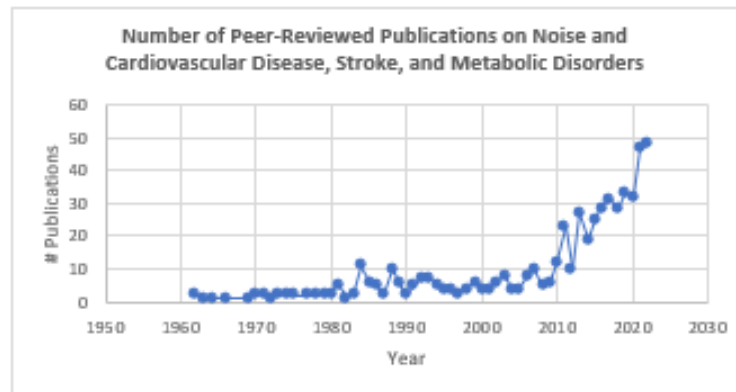


Following the Science

Noise comes from transportation, industry, construction, mining, blasting, and other sources. It is often associated with fossil fuels. Nationwide studies show that exposure to road and air traffic noise is highest in [minority and low-income neighborhoods](#) and [in public schools](#) serving lower income and minority students. Poorer pre-existing health status of residents in these communities may increase their vulnerability to noise exposure and risk of adverse health outcomes.

The scientific evidence on the harmful health effects of noise is extensive. Loud noise can cause hearing loss, tinnitus, and hyperacusis. Chronic noise, even at low levels, contributes to heart disease, stroke, diabetes and obesity, anxiety and depression, and early death. It impairs children's learning. Today, the mechanisms by which noise causes heart disease, stroke and metabolic disease are understood at the cellular and molecular levels. A useful synopsis is provided in the [APHA policy statement](#).

Over the past several decades, the number of publications on noise and cardiovascular disease, stroke, and metabolic disorders has grown dramatically (see Chart below). By the end of 2022, it is estimated that 550 papers will have been published.



[PubMed search, 4/20/22: \[noise\[Title\] AND \(cardiovascular\[Title\] OR heart\[Title\] OR stroke\[Title\] OR diabetes\[Title\] OR metabolic\[Title\] OR obesity\[Title\]\) NOT \(signal\[Title\] OR image\[Title\] OR ratio\[Title\]\)\]](#)

- [A study](#) presented at the recent American College of Cardiology conference (April 2022) found that 5% of heart attacks in 16,000 hospitalized patients were attributable to high transportation noise exposure and that high noise exposure increased the risk of heart attack rate by 72%. The researchers concluded that high noise exposure may account for 5% of all heart attacks in the state.

Based on the strength of the scientific evidence on noise and cardiovascular health, the World Health Organization issued stringent [noise guidelines](#) (2018) for air, rail, and road transportation sources. Those guidelines are much lower -- **sometimes by an order of magnitude or more** -- than those described in the EPA's 1974 "[Levels Document](#)" or those considered acceptable by the Federal Aviation Administration.



Advancing Environmental Justice

The Bipartisan Infrastructure Law presents an opportunity to fund safer, more sustainable airports, highways, and transportation infrastructure. Many of these projects are likely to occur in proximity to EJ communities, exposing them to ongoing noise and pollution, perhaps on a daily basis for several years. We have submitted statements to WHEJAC, urging them **include it in EIScreen 2.0** in order to be able to address harmful noise from infrastructure projects. We are suggesting NEJAC to do the same. Measures that can help protect these communities include asking states to make quiet machinery a pre-condition for funding, enforcing existing noise regulations, installing sound barriers and sound insulation, and creating quiet green spaces alongside projects. These measures would have immediate and measurable benefits. NEJAC can make its voice known on the need for noise barriers and other feasible actions for residents, so that these needs are incorporated in planning and policy.

Transparency

We understand that EPA has many priorities and that noise is not yet on its radar screen. But it needs to be back on the radar screen because of the large population exposed, the seriousness of the health effects, and the disparate burden placed on the health and well-being of EJ communities.

We have approached WHEJAC, NEJAC, and offices within EPA directly with the problem. We have proposed a small budget (\$18 MM; 0.2% of the EPA budget for 2023) that could be used in getting things started. The vast majority of that budget comprises grants and contracts that could be used to assist communities. The high costs of healthcare for noise-related disease and impairments, like heart attacks and learning impairment, more than justify that small investment. To date, we have not heard back on what the EPA intends to do about this issue.

We hope that NEJAC can help communicate to EPA the need to address noise as a public health problem and an environmental justice problem.

- **Failure to address noise exposes EJ communities to preventable harm and invites the normalization of a hazardous situation.**
- ***Actions to prevent harm are feasible and affordable.***

Thank you for your attention and consideration.

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Oral Statement to the White House Environmental Justice Advisory Council

Jamie Banks, President, Quiet Communities, and Rick Reibstein, Chair, Legal Advisory Committee, Quiet Communities

January 26, 2022

Good evening and thanks for this opportunity.

My name is Jamie Banks. I am the founder and president of OCI – a national nonprofit organization working with communities affected by noise and related pollution. I also chair the Noise & Health Committee of the APHA.

Today, hundreds of communities in the nation struggle, without Federal support, to confront harmful noise and related pollution. There is a nexus with fossil fuels. Noise is a public health problem, an environmental problem, and an EJ problem. Our organization is trying to provide support to these communities in the absence of a federal program, but we can barely scratch the surface.

Noise is not simply an “annoyance” or “nuisance” -- as some believe -- but a serious public health risk. Noise damages not only hearing but cardiovascular, metabolic, neurological and psychiatric health, as well as children's learning. It interferes with thinking, communication, and socialization. Several national studies in addition to many local studies show that EJ communities bear the brunt of noise from sources ranging from road, rail, and air traffic to construction to industry – pre-disposing them to poorer health and learning outcomes. Addressing noise now is especially important given that major infrastructure projects -- funded by the **Infrastructure Act** -- are likely to impact EJ communities the hardest.

The Noise Control Act of 1972 was never rescinded but was de-funded 40 years ago by the Reagan Administration. However, that Act is still the law of the land, similar in strength and scope to the other core EPA environmental laws enacted around that same time. The Act contains a number of non-discretionary mandatory requirements for EPA action that are not currently being fulfilled. Addressing them again as they were before the program was de-funded, would lead to major improvements in public health.

Quiet Communities petitioned the EPA in 2017 to re-establish the federal noise control program. We have written to members of Congress to provide funding to the EPA to do so. We have submitted comments to NEJAC. We are in discussions with EPA and have proposed a modest budget to re-establish the program. Providing assistance and facilitating funding for things like highway sound barriers and sound insulation, enforcing existing noise regulations, and creating quiet green spaces along with infrastructure improvements, would go a long way to mitigating the problem in EJ communities. Much of this is low hanging fruit.

We urge the Council (WHEJAC) to include noise as an addressable problem. In particular, we ask the White House to request that Congress again fund the EPA to implement the noise control program and ask that noise be integrated into EPA, public health, other relevant programs, and screening tools to protect EJ communities from the unnecessary impacts of excessive noise.

Thank you.

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APPENDIX F: EXCERPTS FROM EPA'S PUBLICATION: *NOISE CONTROL PROGRAM: PROGRESS TO DATE—1980*

The EPA published a 60-page booklet entitled *Noise Control Program: Progress to Date—1980* in April of 1980,¹⁵³ approximately one year before the decision was made by the incoming Reagan Administration to defund the Act. The document reviewed the actions of the Agency to implement Title IV of the Clean Air Act of 1970, the Noise Control Act of 1972, and the Quiet Communities Act of 1978. Below are selected excerpts from the document.

INTRODUCTION

Under the Noise Control Act of 1972, the Agency was mandated to:

- Identify major sources of noise
- Regulate those identified sources
- Propose aircraft noise standards to the FAA
- Label noisy products
- Engage in research, technical assistance, and dissemination of public information, and
- Coordinate all Federal noise control efforts.

The Quiet Communities Act of 1978 required the agency to fund, through grants, cooperative agreements or contracts:

- Financial assistance to States and localities for:
 - Problem identification
 - Noise control capacity building
 - Transportation noise abatement
 - Evaluation and demonstration of noise control techniques.
- Establishment of regional technical assistance centers
- Provision of assistance in staffing and training for State and local programs
- Maximum use of Older Americans in noise control programs
- Conduct of a national environmental noise assessment
- Development of education materials
- Loans of equipment to States and localities
- Increased noise research.

QUIET COMMUNITIES ACT IMPLEMENTATION (Section 14)

Strong State and local noise control programs are essential to the achievement of significant reductions in the noise exposure of the public. EPA has established a goal of stimulating 40 State and 400 active local noise control programs in communities with populations of 25,000 or greater by 1985. Both State and local controls and Federal emission standards on newly manufactured products are key parts of the national noise control strategy.

¹⁵³ NOISE CONTROL PROGRAM: PROGRESS TO DATE, *supra* note 23.

During 1979, cooperative agreements were awarded to 15 States, 12 communities, and 10 Regional Noise Technical Centers -all managed by EPA's regional noise offices.

Over 110 workshops have been attended by more than 4,000 noise officials at various locations throughout the country.

EPA has developed an automated system called LISTEN (Local Information System to Evaluate Noise) to assist communities in assessing their noise problems and in planning their strategy for abating and controlling noise.

Both a *Model Community Noise Control Ordinance* and model State noise control enabling legislation have been developed by EPA. To date, twenty States have incorporated model legislation guidelines in their noise control programs.

The ECHO [Each Community Helps Others] program helps communities throughout the U.S. to solve noise problems with the help of noise control experts from other communities that have faced and solved similar problems. During 1979, 25 volunteer community noise advisors provided onsite technical assistance and advice to community and State noise programs throughout the country.

Examples of ECHO activities are:

- Sioux City, Iowa assisted Fort Dodge, Iowa, in developing a noise control ordinance.
- Brookline, Massachusetts assisted Portland, Maine, in selecting sites for its noise survey and monitoring survey progress and helped many other New England communities.
- Eugene, Oregon instructed 11 police officers from Bellingham, Washington, in noise enforcement methods.
- Colorado Springs also trained nine police officers from Rapid City, South Dakota, in similar methods.
- Huntsville, Alabama helped Kingsport, Tennessee, conduct an attitudinal survey.
- Rockaway, New Jersey provided advice to many communities in the state and conducted noise enforcement training in Puerto Rico.

In addition to the national ECHO program, a new dimension has been added with the initiation of State ECHO programs. Seven community noise advisors are now working under 1979 EPA/State Cooperative Agreement, and as their number increases, the multiplier effect of ECHO will provide assistance to many more communities. The ECHO concept will be expanded to include airport planning in FY 80.

Regional Technical Assistance Centers have been established in universities in each of the 10 EPA regions. These Centers will supplement the Regional effort in providing technical assistance and training to State and local officials.

The technical assistance offered by the Centers will include: collection of acoustical and attitudinal data, expert testimony, development of noise control ordinances, analyses of existing ordinances, equipment loan, and direct assistance to communities. Training efforts will include workshops and seminars, both on and off campus, as well as correspondence courses. The exact mix of technical assistance and training will vary from region to region.

EPA has developed the Airport Noise Evaluation Process, a simplified and objective approach for determining aviation noise impacts. This process was designed for use by individuals lacking an in-depth background in aircraft acoustics and utilizes information pertaining to airport operations and local demographics.

A major public education/information effort was launched in 1976 and has been given increased emphasis in response to the Quiet Communities Act of 1978. Programs and materials [are] designed and developed to provide the public with information on the effects of noise on their health, and quality of life and on specific remedies to alleviate or reduce this growing environmental problem. . . .

EPA has also established under contract the National Information Center for Quiet as a national clearinghouse for the collection and dissemination of public education/information materials on noise, its effects, and methods used to quiet the environment.

NOISE EMISSION STANDARDS AND REGULATIONS

Identification of Major Sources of Noise, Noise Criteria, and Control Technology (Section 5)

Criteria and Levels Documents

Under this Section of the Act, EPA is required to publish two major documents: the *Criteria Document* and the *Levels Document*.

The *Criteria Document* represents an appraisal of available knowledge relating to the health and welfare effects of noise.

The *Levels Document* identifies levels of environmental noise requisite to protect the public health and welfare with an adequate margin of safety. In accordance with the Act, this document does not take economics and technology into account. However, it does provide helpful guidance in evaluating the benefits to be gained from noise abatement actions. An abbreviated version of the *Levels Document* is also available.

The agency is currently undertaking studies to supplement the Criteria and Levels documents. These studies include work on: hearing loss, intrusive characteristics of noise, and dose/response relationships.

A major deficiency in the Criteria document results from the lack of sufficient knowledge of the nonauditory effects of noise. The Quiet Communities Act of 1978 mandates EPA to investigate the effects of noise "with special emphasis on nonauditory effects." EPA is conducting research involving noise-induced hypertension in monkeys and plans to extend this research effort by undertaking epidemiological studies in FY1981.

To set a research course for the future, the agency has developed a Five-Year Health Effects Research Plan and a more detailed plan for research on the cardiovascular effects of noise.

Major Sources Identification

EPA is further required to publish reports identifying major sources of noise, to provide information on controlling noise from those sources, and to regulate those sources. The Agency has issued several separate identification documents. The first identification, published June 21, 1974 (39 FR 22297), addressed portable air compressors and medium and heavy trucks, for which regulations have been promulgated.

The Agency has subsequently identified, on May 28, 1975 (40 FR 23105): wheel and crawler tractors (construction equipment); truck-mounted solid waste compactors (garbage trucks); motorcycles and motorcycle replacement exhaust systems; buses; and truck transport refrigeration units.

The Federal Register of January 12, 1977 (42 FR 2525) cited power lawn mowers as major noise sources.

On February 3, 1977 (42 FR 6722), pavement breakers and rock drills were similarly identified.

EPA has been conducting a number of pre-identification studies that will allow decisions to be made on a phased basis concerning possible identification of additional major sources of noise. Among the products studies are automobiles and light trucks, tires, air conditioners, chainsaws, snowmobiles, motorboats and earth moving equipment used in construction.

Noise Emission Standards for Products Distributed in Commerce (Section 6)

Final Regulations

On January 14, 1976 (41 FR 2162), the Agency published final regulations for newly manufactured portable air compressors, which will eliminate these compressors as a major source of construction site noise.

On April 13, 1976 (41 FR 15538), the Agency published noise regulations for medium and heavy trucks. The regulation calls for the following levels, in dBA measured at 50 feet: 83 dB in January 1, 1978 and 80 dB in January 1, 1982. These regulations will reduce the urban traffic noise impact for 93 million people. A more stringent standard has been reserved for promulgation in the 1985 time period, and work is now underway to develop the necessary data on which this future regulatory decision will be made.

On October 1, 1979, the Agency published final standards for newly manufactured truck mounted solid waste compactors, better known as garbage trucks (44 FR 56524).

Proposed Regulations Issued

On July 11, 1977, EPA proposed noise emission regulations for new wheel and crawler tractors having horsepower ratings from 20 hp to 500 hp (42 FR 35804). These machines are generally used for bulldozing and front-end loading operations at construction sites.

On September 12, 1977, EPA proposed regulations to substantially reduce exterior and interior noise emitted from newly manufactured city buses, school buses, and intercity buses (42 FR 45776).

On March 15, 1978, EPA proposed regulations (43 FR 10822) to reduce noise from newly manufactured motorcycles and motorcycle replacement exhaust systems. Street, offroad, and moped-type motorcycles are covered. [Editor's Note: This rule was later promulgated and is in effect in 2022.]

Notices of proposed rulemaking have not yet been issued for pavement breakers and rock drills, truck transport refrigeration units, or lawnmowers. These are expected to be issued in 1983, 1984, and 1984, respectively.

Railroad Noise Emission Standards (Section 17)

EPA promulgated, on December 31, 1975, regulations setting specific maximum in-use noise standards applicable to trains operated by interstate rail carriers.

The EPA rules provide for comprehensive Federal preemption over State and local rail carrier noise ordinances on the equipment and facilities covered by the EPA standards, as the Noise Control Act requires.

Motor Carrier Noise Emission Standards (Section 18)

On October 29, 1974, EPA promulgated regulations, effective October 15, 1975, setting specific maximum in-use noise standards applicable to vehicles over 10,000 pounds Gross Vehicle Weight Rating (GVWR) operated by motor carriers engaged in interstate commerce. This regulation will lessen the noise impact for approximately 10 million people.

The regulation also requires vehicle exhaust systems not to be defective and bans the use of certain noisy tread tires on vehicles subject to the regulation.

Product Labeling (Section 8)

On September 28, 1979, the Agency published the *General Provisions for Noise Labeling and Noise Labeling Requirements for Hearing Protectors* (44 FR 56120).

Studies are underway on several household and consumer products to determine their candidacy for noise labeling. The Agency has published as part of the "General Provisions" minimum requirements for voluntary product noise labeling by manufacturers that could obviate the need for mandatory Federal labeling. Manufacturers of both noise producing and reducing products

are being encouraged to develop voluntary labeling programs, thus minimizing Federal involvement.

Low Noise Emission Products (Section 15)

On February 13, 1974, EPA issued certification procedures for low-noise emission products (LNEP) to be purchased by the Federal government.... EPA is now implementing a comprehensive program concerning low-noise emission products.

A Notice of Proposed Rulemaking for LNEP criteria and procedures for use by EPA in determining whether a product can be certified as a low-noise-emission product and qualified as a suitable substitute for products purchased by the Federal government was published on May 27, 1977 (42 FR 27442).

Aircraft Noise Standards (Section 7)

Although aviation noise regulatory authority rests with the FAA, EPA is mandated to play a significant role in the aviation regulatory process. Under Section 7 of the Act, EPA was directed to prepare a comprehensive report on the problem of aircraft/airport noise and to submit regulatory proposals to the FAA. The FAA must either accept the EPA proposals or state in the Federal Register why the proposals were rejected, accompanied by a detailed analysis of EPA's submittal.

If EPA believes that any FAA action regarding the EPA proposals does not adequately protect the public health and welfare, the Agency can request the FAA to publish a report in the Federal Register further stating the basis behind any FAA decisions.

EPA prepared the Report to the Congress on Aircraft-Airport Noise in 1973 and subsequently has submitted to the FAA six Source Regulations, two Operational Regulations, and one package dealing with the Airport Noise Regulatory Process.

Aviation Report to Congress

EPA has prepared an update of its 1973 Report on Aircraft-Airport Noise for submission to Congress in 1980. In this report entitled "Aviation Noise -The Next Twenty Years," the adequacy of aviation noise abatement actions taken is measured against FAA and EPA goals for aviation noise exposure reduction. The report shows that the exposure goals will not be reached unless further action is taken. Therefore, a national strategy for reducing the number of people exposed to pervasive aircraft noise in the vicinity of airports is proposed. The need for support of all parties – government, industry and the public – is outlined, and EPA's plans to initiate its portion of this national strategy is detailed.

NOISE CONTROL PROGRAM BUDGETS

NOISE CONTROL PROGRAM BUDGETS

Fiscal Year	Office of Noise Abatement & Control		Office of Enforcement Noise Enforcement Division		Regional Offices**
	(\$ Millions)	(Positions)	(\$ Thousands)	(Positions)	(Positions)
1971	\$.3	11	\$ 0	0	0
1972	1.2	12	0	0	0
1973	2.7	15	0	0	0
1974	4.2	45	20.6	1	0
1975	5.1	55	20.8	1	0
1976	9.8	74	385.0	18	10
1977	9.8	74	707.0	22	11
1978	10.3	76	1,027.0	24	12
1979	10.0	68	1,005.0	22	15
1980	11.9	70	1,004.0	23	14
1981	12.0*	67*	941*	19*	13.0*

*Recommended in the President's Budget Message to the Congress.
 **Dollar funding included with Office of Noise Abatement and Control.