

The Clean Air Act of 1963: Postwar Environmental Politics and the Debate Over Federal Power – 2020.08.15 DISCUSSION DRAFT

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This Article explores the development of the Clean Air Act of 1963, the first law to allow the federal government to fight air pollution rather than study it. The Article focuses on the postwar years – 1945-1963 – and explores the rise of public health medical research, cooperative federalism, and the desire to harness the powers of the federal government for domestic social improvement, as key precursors to environmental law. It examines the origins of the idea that the federal government should “do something” about air pollution, and how that idea was translated, through drafting, lobbying, politicking, hearings, debate, influence, and votes, into a new commitment to a national program to end air pollution in the United States. In addition to presenting new perspectives on this understudied period in the development of environmental law, it is hoped that this work will shed some light on the nature of political opposition to environmental regulation, which today is one of the greatest challenges to effective pollution control.

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Introduction

This Article arose out of a larger project to examine the development of anti-environmental-regulatory politics in U.S. conservative circles between 1945 and 1980.² I found that, prior to developing that thesis, I needed to build out the history of environmental regulatory programs during the same period, because existing materials simply did not shed enough light on the physical, social, or political contexts within which early oppositions developed.³ To bring the period to life, I chose to focus on the Clean Air Act of 1963 – itself rarely examined – and this Article is the result.⁴

This Article also reflects my interest in expanding the analytical tools used to study environmental legislation. In particular, the last twenty years have seen enormous advances in our understanding of postwar U.S. society and politics. Scholars have increasingly recognized the sustained importance of conservative countercurrents in U.S. politics and culture. There is an ongoing project to update political histories to account for these new perspectives, and environmental legal scholarship should

² Prior quality studies of conservative opposition to environmental law and regulation include JAMES MORTON TURNER & ANDREW C. ISENBERG, *THE REPUBLICAN REVERSAL: CONSERVATIVES AND THE ENVIRONMENT FROM NIXON TO TRUMP* (2018); JACQUELINE VAUGHN SWITZER, *GREEN BACKLASH: THE HISTORY AND POLITICS OF THE ENVIRONMENTAL OPPOSITION IN THE U.S.* (1997); Alex Boynton, *Formulating an Anti-Environmental Opposition: Neoconservative Intellectuals during the Environmental Decade*, 8 *THE SIXTIES* 1–26 (2015).

³ Quality overviews of the environmental policy, politics, and regulation in the United States often do not focus much on the postwar years. *E.g.*, RICHARD N. L. ANDREWS, *MANAGING THE ENVIRONMENT, MANAGING OURSELVES: A HISTORY OF AMERICAN ENVIRONMENTAL POLICY* (3d ed. 2020). SAMUEL P. HAYS & BARBARA D. HAYS, *BEAUTY, HEALTH, AND PERMANENCE ENVIRONMENTAL POLITICS IN THE UNITED STATES, 1955-1985* (1987). There has been more recent interest in the period, however. *E.g.*, CHAD MONTRIE, *THE MYTH OF SILENT SPRING : RETHINKING THE ORIGINS OF AMERICAN ENVIRONMENTALISM* (2018); THOMAS G. SMITH, *STEWART L. UDALL : STEWARD OF THE LAND* (2017); J. R. MCNEILL ED. & CORINNA R. UNGER ED., *ENVIRONMENTAL HISTORIES OF THE COLD WAR* (2010); ADAM ROME, *THE BULLDOZER IN THE COUNTRYSIDE : SUBURBAN SPRAWL AND THE RISE OF AMERICAN ENVIRONMENTALISM* (2001).

⁴ The Clean Air Act of 1963, Pub. L. 88-206, 77 Stat. 392 (1963) (the “1963 Act”). There is very little literature on the 1963 Act. The best is Randall P. Ripley, *Congress and Clean Air: The Issue of Enforcement, 1963*, in *CONGRESS AND URBAN PROBLEMS* (Frederic N. Cleaveland ed., 1969). However, as discussed *infra* n. 82, Ripley is a challenging source because it contains no citations. Unfortunately, nothing more recent has improved on it. *Compare* Arthur C. Stern, *History of Air Pollution Legislation in the United States*, 32 *J. AIR POLLUT. CONTROL ASSOC.* 44–61 (1982). CHRISTOPHER J. BAILEY, *CONGRESS AND AIR POLLUTION: ENVIRONMENTAL POLICIES IN THE USA* 103–08 (1998). *E.g.*, Arnold W. Reitze, Jr., *The Legislative History of U.S. Air Pollution Control*, 36 *HOUS REV* 679–741, 689–90 (1999). Christopher D. Ahlers, *Origins of the Clean Air Act: A New Interpretation*, 45 *ENVTL L* 75–127, 84–94 (2015). William H. Rodgers, Jr., 1 *Environmental Law* 169-184 (1986).

benefit from these advances. This is especially important in today's world of sustained political assault on environmental regulation.⁵

Finally, this Article seeks to complicate and deepen the stories told about the U.S. environmental movement and environmental law – to move away from heroic narratives and toward a more contingent, messy, and realistic understanding of legislative development. We may imagine that Rachel Carson's *Silent Spring* triggered the movement, or that Congress passed the Clean Water Act in response to the Cuyahoga river fire, but these are, perhaps obviously, massive oversimplifications. In the same fashion, we may imagine that Richard Nixon was the primary political proponent of federal environmental law between 1968 and 1972 because he was the president then and worked hard to claim the credit, or even that Senator Edmund Muskie was because he chaired a key Senate committee and did a great deal to build support for federal environmental legislation (and worked hard to claim the credit too), but many, many other people shared the legislative laboring oar. This is especially clear in the postwar period in the air pollution context.⁶

Thus, this Article presents an interdisciplinary study of the Clean Air Act of 1963. Close examination reveals that it is a fascinating story. To tell it, this Article proceeds in two Parts:

- Part I provides background. Section I.A explores the physical and social trends and circumstances that defined air pollution as a policy problem circa 1960. Section I.B examines the relevant interests involved in air pollution – players in a world pre-dating the words “environmentalist” and “environmentalism” in their modern senses. By the end of Part I, the reader should have a clearer feeling for the world of air pollution politics circa 1960, when it was first suggested that a federal agency should have the authority to clean it up.

⁵ On the project to incorporate conservatism into U.S. political history generally, and environmental history specifically, see Kim Phillips-Fein, *Conservatism: A State of the Field*, 98 J. AM. HIST. 723–743 (2011). Among the many excellent recent political histories of U.S. conservatism, see JEFFERSON DECKER, *THE OTHER RIGHTS REVOLUTION: CONSERVATIVE LAWYERS AND THE REMAKING OF AMERICAN GOVERNMENT* (2016); DARREN DOCHUK, *FROM BIBLE BELT TO SUNBELT: PLAIN-FOLK RELIGION, GRASSROOTS POLITICS, AND THE RISE OF EVANGELICAL CONSERVATISM* (2011); KIM PHILLIPS-FEIN, *INVISIBLE HANDS: THE BUSINESSMEN'S CRUSADE AGAINST THE NEW DEAL* (2010); THOMAS W. EVANS, *THE EDUCATION OF RONALD REAGAN: THE GENERAL ELECTRIC YEARS AND THE UNTOLD STORY OF HIS CONVERSION TO CONSERVATISM* (2006); LISA MCGIRR, *SUBURBAN WARRIORS: THE ORIGINS OF THE NEW AMERICAN RIGHT* (2001).

⁶ On Nixon, see J. BROOKS FLIPPEN, *NIXON AND THE ENVIRONMENT* (2000). On Muskie, see Joel K. Goldstein, *Edmund S. Muskie: The Environmental Leader and Champion*, 67 MAINE LAW REV. 226–233 (2014); Robert F. Blomquist, *In Search of Themis: Toward the Meaning of the Ideal Legislator - Senator Edmund S. Muskie and the Early Development of Modern American Environmental Law, 1965-1968*, 28 WILLIAM MARY ENVIRON. LAW POLICY REV. 539–658 (2003); Robert F. Blomquist, *Senator Edmund S. Muskie and the Dawn of Modern American Environmental Law: First Term, 1959-1964*, 26 WILLIAM MARY ENVIRON. LAW POLICY REV. 509–612 (2001); Robert F. Blomquist, *To Stir up Public Interest: Edmund S. Muskie and the U.S. Senate Special Subcommittee's Water Pollution Investigations and Legislative Activities, 1963-66 - A Case Study in Early Congressional Environmental Policy Development*, 22 COLUMBIA J. ENVIRON. LAW 1–64 (1997). For studies encompassing key Congressional players, see, e.g., PAUL CHARLES MILAZZO, *UNLIKELY ENVIRONMENTALISTS: CONGRESS AND CLEAN WATER, 1945-1972* (2006); BAILEY, *supra* note 4.

- Part II describes the development of federal air pollution law, from its genesis through what would become the Clean Air Act of 1963, tracking in detail the bills, advocacy, hearings, and legislative actions that produced the text of the final law. The Part begins by examining the development of federal air pollution control legislation between 1948 and 1958. It then examines the development, from year to year, of the legislative proposals that would eventually form the Clean Air Act of 1963. Throughout the discussion, the Article focuses on the debate over the appropriate role of the federal government in air pollution control, and particularly on whether it should have any independent power to fight air pollution on its own authority, without permission from or interference by state or local governments.

A key theme throughout is the ongoing role of conservative politics in the development of air pollution control law during this period. Federal entry into the air pollution problem space was a departure from the past, and conservative opposition consistently defined the scope of the law.

On December 11, 1963, the 88th Congress enacted a law “to improve, strengthen, and accelerate programs for the prevention and abatement of air pollution.” The press primarily focused on its allocation of \$95 million (\$800 million today⁷) for federal grants-in-aid to state pollution control programs, and it was typically framed as an incremental extension of the 1955 Air Pollution Control Act, which had piloted federal-state cooperative air pollution research at a smaller scale. Less remarked-upon at the time, however, the new law also permitted the U.S. federal government to fight air pollution in American cities for the first time. This authority – wrapped though it had been inside layer upon layer of procedural safeguards to ensure it would be difficult to use – was recognized both by its authors and by its opponents as a significant expansion of federal power. Only a singled paper bothered to mention the law’s official name: the Clean Air Act of 1963.⁸

I. Air Pollution in the United States in 1960

Today, the most common windows into the air pollution landscape circa 1960 are digital articles recalling the work of the EPA’s 1971 Documerica project. Typically, these writeups will contain images of smoggy city centers, most often Los Angeles, and will remark upon the value of the EPA and pollution control laws given the drastically improved environmental quality we enjoy today. The

⁷ All dollar equivalencies calculated using the [U.S. Inflation Calculator](#).

⁸ 1963 Act § 14 (short title). For a typical report on the bill’s passage, see *Johnson Signs Fund Bill to Help States Fight Air Pollution*, APPLETON POST-CRESCENT, Dec. 17, 1963, at 1. Reporters in jurisdictions most active in air pollution control did note the enforcement elements. See, e.g., John H. Averill, *House Approves Bill Giving U.S. Broad Smog Authority*, THE LOS ANGELES TIMES, Dec. 11, 1963, at 3; *Pollution Control Gets Teeth*, THE PHILADELPHIA INQUIRER, Dec. 13, 1963, at 34. The one paper to mention the short title (based on searches of newspapers.com and ProQuest) was the Los Angeles Times. Robert C. Toth, *U.S. Moves to Combat Increasing Air Pollution: Federal Government Given New Powers as Contamination Bill Hits \$11 Billion Year*, LOS ANGELES TIMES, Dec. 22, 1963, at B2.

Documerica project was one of several important early environmental policy communications initiatives, and the current writeups are valuable examples in a similar genre.⁹

However, the Documerica images are not adequate to set the stage for the 1963 Act. The photos were taken almost a decade later, at the request of a government agency that did not yet exist, as part of a larger social movement that also did not yet exist. In addition, such images are static, and do not capture the extent to which things were changing, or not changing, at the time they were taken. To provide this larger context, Section A introduces the rapidly changing postwar world of 1950-1960, and identifies several key trends that, together, generated a rising demand for a strengthened governmental response to the air pollution problem.

A. The Pace of Change

The 1950s were a period of extraordinary industrialization, urbanization, and growth even as compared to the general baseline of almost constant U.S. expansion.¹⁰ In absolute population terms, by 1960 the postwar baby boom had pushed the U.S. population from 151 million to 179 million, meaning an unprecedented 28 million additional people (+18%) in ten years.¹¹ This growth was essentially uniform across racial and socioeconomic classes, but geographically it was concentrated almost entirely in newly developed suburban areas. That is, patterns of population movement – including the ongoing movement of African Americans to northern cities, and of white urban populations to the suburban periphery, subject to both *de jure* and *de facto* racial and socioeconomic segregation – meant that the nation’s urban-suburban geography, where 70 percent of the people now lived, was increasingly separated into primarily white middle-class suburban peripheries and increasingly Black and relatively poor urban city centers, but with much of the suburban population

⁹ E.g., Alan Taylor, *DOCUMERICA: Images of America in Crisis in the 1970s*, THE ATLANTIC, <https://www.theatlantic.com/photo/2011/11/documerica-images-of-america-in-crisis-in-the-1970s/100190/> (last visited May 28, 2020); Jialu Chen, *Photos of Smoggy 1970s America*, MOTHER JONES, <https://www.motherjones.com/politics/2011/12/smog-photos-1970s-america/> (last visited May 28, 2020). Today’s online interest in Documerica was the result of a successful joint archive digitization project and promotional effort by the National Archives and EPA, which put 15,000 vintage photographs online, and created public interest using a student contest that was overshadowed by press writeups. See [News Brief \(HQ\): NARA and EPA Launch Documerica-Inspired Student Multimedia Contest](#) (Nov. 1, 2011). For early public communications efforts, see PHS, *Free Films on Air Pollution*, Pub. No. 1264 (1969); PHS, *The Cartoonist Focuses on Air Pollution*, Pub. No. 1561 (1966); and PHS & U.S. Senate Public Works Committee, *Troubled Waters* (1964).

¹⁰ This Article approaches the twentieth-century United States as a product of the technological innovations of the late nineteenth century. See VACLAV SMIL, *CREATING THE TWENTIETH CENTURY: TECHNICAL INNOVATIONS OF 1867-1914 AND THEIR LASTING IMPACT* (2005); Joel Mokyr, *The Second Industrial Revolution, 1870-1914*, in *STORIA DELL’ECONOMIA MONDIALE* 219 (Valerio Castronovo ed., 1999). With respect to postwar growth, there are many economic histories of the United States, all of which recognize the importance of the Great Depression, the New Deal, and World War II as contributing factors. See, e.g., Price V. Fishback, *The New Deal in American Economic History*, and Taylor Jaworski & Price V. Fishback, *Two World Wars in American Economic History*, in 2 *OXFORD HANDBOOK OF AMERICAN ECONOMIC HISTORY* (Louis P. Cain et al. (eds.), 2018).

¹¹ U.S. CENSUS BUREAU, *STATISTICAL ABSTRACT OF THE UNITED STATES: 1961* 5 (82d ed. 1961), <https://www.census.gov/library/publications/1961/compendia/statab/82ed.html> (last visited Jun. 27, 2020).

still commuting to the city centers.¹² At the same time, median real annual family income had increased from \$3,300 (\$35,000 today) in 1950¹³ to \$5,600 (\$48,500 today) in 1960 (+39%),¹⁴ and unemployment had held steady around 5.5% for the entire decade.¹⁵ Similarly, business was booming, with overall gross national product increasing by 93% over ten years.¹⁶ Thus, even accounting for a recession in the late 1950s, and the widespread inequalities hidden beneath these averages, the decade was, by many measures, a prosperous and affluent one in the United States.

This remarkable growth, however, was itself outpaced by concurrent intensifications in consumption and production that combined to magnify the population's environmental impact. With respect to consumption, this was largely intentional—the nation's entire postwar economic policy (and much of its social policy) was built around increased individual consumption.¹⁷ As one highly relevant example, between 1950 and 1960 the number of automobiles registered in the United States increased from 40 to 60 million (+50%), meaning not only that there were more people with cars, but also that there were more cars per person, a pattern that repeated itself across the entire economy.¹⁸

¹² *Id.* at 21–22.. Between 1950 and 1960, the U.S. urban population increased from 96 to 125 million. *See id.* at 22. However, the census definition of “urban” began incorporating suburban developments in the 1950 census. *See* U.S. CENSUS BUREAU, *U.S. Census History, Urban and Rural Areas*, https://www.census.gov/history/www/programs/geography/urban_and_rural_areas.html (last visited Jun. 27, 2020). In fact, the growth was almost entirely in the suburban areas. Transportation Research Board of the National Academies, *Commuting in America III* at xiv (2007), <http://www.trb.org/main/blurbs/156993.aspx> (last visited Jun. 27, 2020). For a deeper analysis of the suburbanization process in this era, *see* ROSALYN BAXANDALL & ELIZABETH EWEN, *PICTURE WINDOWS : HOW THE SUBURBS HAPPENED* (2000).

¹³ U.S. CENSUS BUREAU, *INCOME OF FAMILIES AND PERSONS IN THE UNITED STATES: 1950*, Rep. No. P60-09 (1952), <https://www.census.gov/library/publications/1952/demo/p60-009.html> (last visited Jun. 27, 2020).

¹⁴ U.S. CENSUS BUREAU, *INCOME OF FAMILIES AND PERSONS IN THE UNITED STATES: 1960*, Rep. No. P60-37 (1962), <https://www.census.gov/library/publications/1962/demo/p60-037.html> (last visited Jun. 27, 2020). Acknowledging the significant and persistent racial inequalities in the United States during this period and beyond, median annual real income for nonwhite families increased from \$1,869 (\$20,000 today) in 1950 to \$3,230 (\$28,000 today) in 1960, a 40% increase. *Compare* Table 3 in *Id.* with Table 3 in U.S. CENSUS BUREAU, *supra* note 13. There was also a significant urban-rural disparities, with rural median annual non-farm income increasing from \$3,000 (\$32,000 today) in 1950 to \$5,600 (\$48,500 today) in 1960, and rural median annual farm family income increasing from \$2,000 in 1950 to \$2,875 (\$25,000) in 1960.

¹⁵ U.S. BUREAU OF LABOR STATISTICS, *Data Series LNU04000000: Labor Force Statistics from the Current Population Survey - Unadjusted Unemployment Rate, Age Over 16*, <https://data.bls.gov/timeseries/LNU04000000> (last visited Jun. 27, 2020).

¹⁶ U.S. BUREAU OF ECONOMIC ANALYSIS, *U.S. Gross National Product*, FRED, FEDERAL RESERVE BANK OF ST. LOUIS, <https://fred.stlouisfed.org/series/GNP> (last visited Jun. 27, 2020).

¹⁷ On fiscal policy, *see* BENN STEIL, *THE BATTLE OF BRETTON WOODS : JOHN MAYNARD KEYNES, HARRY DEXTER WHITE, AND THE MAKING OF A NEW WORLD ORDER 90–91* (2013). On consumption in society, *see* ELIZABETH COHEN, *A CONSUMER'S REPUBLIC : THE POLITICS OF MASS CONSUMPTION IN POSTWAR AMERICA* (2004).

¹⁸ U.S. FEDERAL HIGHWAY ADMINISTRATION OFFICE OF HIGHWAY INFORMATION MANAGEMENT, *HIGHWAY STATISTICS SUMMARY TO 1995: MOTOR-VEHICLE REGISTRATIONS, 1900-1995 (TABLE MV-200)*, <https://www.fhwa.dot.gov/ohim/summary95/> (last visited Jun. 27, 2020). *See also* U.S. BUREAU OF LABOR STATISTICS, *100 YEARS OF U.S. CONSUMER SPENDING: DATA FOR THE NATION, NEW YORK CITY, AND BOSTON*, Rep. No. 991 at 21–32 (2006). That these consumption patterns were unequally distributed by race in the 1950s may be inferred from the salary data discussed at n. 14, *supra*.

These goods had to be produced, packaged, transported, retailed, and consumed, and all of that activity required natural resource inputs and created waste.¹⁹

This profound intensification was combined with a shift in production processes and technologies that contributed to an additional three-fold environmental impact: first associated with increased combustion for production energy, second in increased combustion for use energy, and third in the generation of new, inorganic, and otherwise non-biodegradable waste streams from synthetic materials. For example, shifting from glass to plastic bottles involved higher-intensity energy and resource inputs per produced unit, increased per-capita unit production from disposability, and new inorganic waste streams from the plastic. Chemical pesticides, detergents, automobiles, and electrical appliances all involved higher-energy manufacturing, increased fuel use, and new waste streams.²⁰

This combined consumption and production intensification was discernible in the nation's overall energy use, which increased from 9,700 terawatt-hours (TWH) in 1950 to 13,000 TWH in 1960 – +34% absolute, +13% per capita.²¹ The vast majority of this energy use involved some sort of combustion, particularly of coal (for electricity, industrial processes, and, decreasingly, home heating), natural gas (increasingly for home heating), and petroleum products (especially in transportation fuels), all of which involved waste byproducts emitted into the air. Thus, national air pollution quantities increased from 1950 to 1960.²²

These growth and intensification patterns interacted with other trends that impacted air pollution in complex ways. The first was a general transition away from the use of coal in cities. Between 1950 and 1960, total coal use increased as coal-fired electricity generation almost doubled, but coal use in railroads almost disappeared, and urban residential and commercial use dropped drastically as homeowners and small businesses switched from coal to natural gas for home and boiler heating.²³ The reasons for this switch were many, but included increased availability and falling prices for

¹⁹ On rising municipal waste, *see* National League of Cities and the U.S. Conference of Mayors Solid Waste Management Task Force, *Cities and the Nation's Disposal Crisis* 1 (Mar. 1973).

²⁰ This is the main thesis in BARRY COMMONER, *THE CLOSING CIRCLE: NATURE, MAN, AND TECHNOLOGY* 140–77 (1971). Commoner argued that technological developments were the primary or, in some interpretations, only important contributors to the era's pollution problems. This was famously disputed, and efforts to define the relative contributions to pollution of population, affluence, and technology factors have continued ever since. *See generally* Marian R. Chertow, *The IPAT Equation and Its Variants*, 4 *J. IND. ECOL.* 13–29 (2000).

²¹ U.S. Energy Information Administration, [History of energy consumption in the United States, 1775–2009](#). The per capita figure is derived as (13,000 TWH / 179 million people) / (9700 TWH/151 million people) = (72.6 TWH/million people) / (64.2 TWH/million people) = 1.13.

²² National sampling data are only available beginning in 1961, as reported in EPA's Historic Air Quality Reports, available at <https://www.epa.gov/air-trends/historical-air-quality-trends-reports>. For estimates of pollutant emissions between 1950 and 1960, *see* U.S. EPA OFFICE OF AIR QUALITY PLANNING AND STANDARDS, *NATIONAL AIR POLLUTANT EMISSION TRENDS, 1900-1998* (2000). According to the latter, four of the six “criteria” air pollutants increased between 1950 and 1960: carbon monoxide (CO) (+7%), nitrogen oxides (NO_x) (+40%), volatile organic compounds (VOCs) (+17%), while sulfur dioxide emissions remained steady and inhalable coarse particulate matter less than ten microns (PM₁₀) decreased (-9%). *Id.* at 3-19 (Table 3-13).

²³ U.S. Energy Information Administration, [U.S. Coal Consumption by End Use, 1950-2019](#).

alternative fuel and equipment. For urban air, this meant real progress. In Chicago, for example, “dustfall” (settled particulate matter) totaled 350 tons per square mile per month in 1930. By 1960, with municipal refuse burn bans adopted and enforced, with natural gas replacing coal in local industrial and home heating applications, with railroads almost exclusively burning diesel, and with newly operating street sweeping programs reducing particulate recirculation, Chicago’s dustfall figure had been reduced to 43 tons per square mile. It seemed, therefore, that modern growth could also bring modern solutions to air pollution.²⁴

The second major trend, however, was photochemical smog. The newer petroleum refining and internal combustion engine processes now powering the nation’s transportation fleets created high volumes of byproducts not prevalent in coal combustion: carbon monoxide (CO), nitrogen oxides (NO_x), and volatile organic compounds (VOCs), total volumes of which all increased in the 1950s. These chemicals react with sunlight, and the resulting new chemicals form a visible pall in the air. Thus, even as many areas enjoyed diminished smoke impacts from coal burning, the transition itself created a new pollution problem with similar (but not identical) effects. This was only first understood in 1948, when Arie Haagen-Smit discovered the relationship through research in California. Even as urban coal combustion waned, smog grew in the same cities, and came to places like Los Angeles that had not previously relied on coal.²⁵

In the aggregate, these patterns – increased population, increased suburban development, increased consumption, higher intensity production, increased waste and waste burning, increased use of coal for electricity production, increased use of natural gas in cities, increased petroleum production and refining, and increased suburban-urban driving – meant that by 1960 in the United States more people, more of the time, in more places, were being exposed to more air pollution than ever before. An influential contemporary study concluded that over 100 million people in the United States – more than half the country – were being exposed to “problematic” air pollution, with about 43 million people in areas with “major” air pollution problems.²⁶

The governmental resources arrayed against the rising air pollution problem were largely local, largely underfunded, and largely ineffective. By 1960, a contemporary tally reported that there were only 86 local air pollution control authorities scattered across the country, with an aggregate (nationwide) staff of 876 people, with a total (nationwide) annual budget of about \$8 million (\$70

²⁴ *Air Pollution: Hearings before the House Health and Safety Subcommittee* (“March 1963 Hearing”), at 91 (March 18, 1963) (statement of James V. Fitzpatrick for Richard Daley, Mayor of Chicago). This hearing is described in further detail in Section II.F.2, *infra*.

²⁵ On Haagen-Smit’s work, see NATIONAL ACADEMY OF SCIENCES, BIOGRAPHICAL MEMOIRS: V.58 196–201 (1989), <https://www.nap.edu/catalog/1645/biographical-memoirs-v58> (last visited Jul. 22, 2020).

²⁶ This information was published as Jean J. Schueneman, *Air Pollution Problems and Control Programs in the United States*, 13 J. AIR POLLUT. CONTROL ASSOC. 116–125, 118 (1963). The number of people exposed to “major” air pollution increased 17% between 1950 and 1960, while the number exposed to “problematic” air pollution increased 29%, while population increase was 18% *Id.* A conference draft of this paper was submitted and discussed in Congressional hearings leading to the Clean Air Act of 1963. See March 1963 Hearing, *supra* n. 24, at 45-73.

million today), responsible for pollution control activities to protect over 50 million people, *i.e.*, roughly half of those thought to be affected. Of these totals, however, Los Angeles alone accounted for 373 staff, a \$3.4 million budget, and 6 million residents, skewing the averages. The majority of these local agencies had only one or two staff and annual budgets under \$25,000 (\$175,000 today).²⁷ In general, then, these agencies did not have funding to support air quality monitoring, new source permitting or review, or abatement and enforcement actions, let alone the political clout to impact powerful local or national industries contributing to the problem.²⁸ While many public health authorities also had taken on air pollution portfolios by this time, they were themselves perpetually underfunded, had many other mandates, and employed very few technical staff trained in pollution.²⁹

Even so, however, there had been notable successes. As the budget figures indicated, California was a leader at the state level. It had modeled legislation to permit inter-jurisdictional air pollution control districts, with Los Angeles taking the most advantage of this authority to address its notorious automobile smog problem. It had also created a statewide air monitoring network, a public research program to understand the relative contributions of various sources to pollution, statewide air quality standards, and the California Motor Vehicle Pollution Control Board, which was beginning to have success inducing national automobile manufacturers to install pollution control devices on new vehicles.³⁰ Another, older model of success was to be found in St. Louis, Missouri, which had sparked a national interest in municipal smoke abatement with its successful program in 1940, which involved forcing a switch to cleaner-burning coal. As of 1960, the St. Louis model had been most famously adapted in Pittsburgh, Pennsylvania, which had worked with nearby industry and residents to promote cleaner fuels and installation of lower-smoke combustion devices.³¹ The fact remained, however, that these examples were significant outliers, and that many efforts to adapt their practices to local circumstances had failed, or never gotten started. Industry, for its part, had been approaching the problem voluntarily, but slowly. Although it is tempting to dismiss these efforts, industry pointed to over \$1 billion (\$8.5 billion today) spent on air pollution control equipment by 1960. And many said they were committed to doing much more.

At issue in 1960, then, was the relative pace of change. How long would it take industry to develop and install the necessary equipment? How long for local pollution control districts to get the problem under control, state by state and city by city, as had St. Louis and Pittsburgh? And what would happen if industries, or state or local governments, declined to act? Who would be endangered in the meantime? Was this acceptable? And if not, should the federal government do

²⁷ Schueneman, *supra* n. 26, at Table 6.

²⁸ March 1963 Hearing, *supra* n. 24, at 53-55.

²⁹ *Id.* at 56.

³⁰ See Chronology of California's Fight Against Air Pollution in California Dept. of Public Health, *California Against Air Pollution, A Six-Year Progress Report 1955-1961* (1962).

³¹ The St. Louis and Pittsburgh programs are discussed further in Section I.B.3, *infra*.

something? In a rapidly changing world, as the pace of the response remained relatively sedate, it became a target of critique, and of reform.

None of the above guaranteed change, however. Although more people were exposed to air pollution, those worst impacted were also the most marginalized members of society. Those in the suburbs may have been annoyed at the problem in the city centers, and at any increases in pollution in their relatively clean suburban environments, but the fact remained that the suburbs were much better than the cities, and U.S. residents had been suffering air pollution with relatively little complaint for decades. What else changed? As discussed in the following sections, the demand for further change required a number of conceptual shifts to reframe air pollution as a major public problem in need of a national solution. Among these was a growing public awareness that polluted air was a serious health hazard, and an increased comfort with government intervention as part of a “modern” society. The United States had become the most powerful nation in the world in part through the expansion of its federal government, from the New Deal through World War II, and there were many interested in harnessing that massive regulatory potential to improve U.S. society. But doing so would require a fight, because federal intervention into air pollution would be, in a word, new, and currents of resistance to reformist programs ran deep in U.S. society as well.

B. Relevant Ideologies, Interests, and Advocacies

Today, air pollution is understood as an “environmental” problem, subject to control by “environmental” laws, subject to advocacy by “environmentalists,” and subject to opposition by “anti-environmentalists.” These currents may be analyzed through the lens of social movement theory, which seeks to understand collective action for social change. But today’s “environmentalism” is one of the “new” social movements of the late 1960s and early 1970s, and it did not yet exist, as such, in the postwar years. Consequently, the laws of the postwar period were not exactly “environmental laws.” Rather, the postwar period was a time when the ideas that would form environmentalism were all present, but not yet clearly combined, and so, to understand the world of environmental law before environmentalism, it is necessary to identify what other “-isms” were in the air.³²

³² On social movement theory and the environment, see Kate O’Neill, *The Comparative Study of Social Movements*, in *COMPARATIVE ENVIRONMENTAL POLITICS: THEORY, PRACTICE, AND PROSPECTS* 115–142 (Paul F. Steinberg & Stacy D. VanDeveer eds., 2012); Marc Edelman, *Social Movements: Changing Paradigms and Forms of Politics*, 30 *ANNU. REV. ANTHROPOL.* 285–317 (2001). On “new” social movements, see Nelson A. Pichardo, *New Social Movements: A Critical Review*, 23 *ANNU. REV. SOCIOLOG.* 411–430 (1997). On social movement theory applied to the environmental movement, see Marco Giugni & Maria T. Grasso, *Environmental Movements in Advanced Industrial Democracies: Heterogeneity, Transformation, and Institutionalization*, 40 *ANNU. REV. ENVIRON. RESOUR.* 337–361 (2015). With respect to understanding environmentalism as a combination of pre-existing elements, see HAYS AND HAYS, *supra* note 3. The Hays argued that “beauty, health, and permanence” (the book’s title) were three values or ideals that, drawn together from a large variety of influences, undergirded modern environmentalism. *Id.* at 13–39. While scholars of environmental political history may disagree on the variety and relative importance of the many influences on modern environmentalism, none seem to disagree that environmentalism itself was a combinatorial or aggregative political process.

It may not be a surprise that public health was relevant. But what about city management? Engineering? This section seeks to introduce and categorize the ideologies, interests, and advocacies that were most relevant to air pollution around 1960. It is a summary, and therefore incomplete. It is a series of generalizations, and so there are likely to be many unaccounted-for exceptions. And it is a discussion of ideas, and thus must be open to different interpretations. Nonetheless, laws do not happen in a vacuum, and each of these discussions is helpful for understanding the eventual development of the Clean Air Act of 1963.

1. Postwar Liberalism and Modern Republicanism

Relevant to all the other ideas discussed below, it is useful to begin by identifying a prevailing paradigm for the place and period – a distinct set of concepts about government, and particularly national government, that dominated and persisted throughout the period, regardless of the party in power, and against which advocacy efforts and dissent could be targeted. In the postwar United States, the prevailing governance paradigm can be called, for lack of a better term, “liberalism.”

Much ink has been spilled on what “liberalism” means. For the purposes of this discussion, in the context of the postwar United States, “liberalism” is understood to be a set of ideas about government defined during Franklin D. Roosevelt’s administrations (1933-1945), combining earlier currents of Progressive-Era reformism with newer theories of political economy that supported government spending to stimulate economic growth. It encompassed the programs of the New Deal, World War II, the Marshall Plan, the Bretton Woods System, and the Cold War – and created a powerful international order aspiring to harness capitalism and improve society, to the mutual benefit of both.³³

Although this liberal order found its expression in the Democratic Roosevelt and Truman administrations, it also survived the transition to the more conservative, Republican, Eisenhower administration. In the immediate postwar U.S., the Republican Party was, among other things, a bastion of opposition to public spending and federal power. But it also included a very strong element of international isolationism, and Eisenhower broke strongly against the isolationist wing, in preference to a commitment to an expanded peacetime military presence. In power, furthermore, Eisenhower accepted the need for government in domestic social affairs and the economy and resisted more activist conservative efforts to dismantle national social programs – a middle-of-the-road approach called by Eisenhower himself “modern Republicanism.” Facing criticism from both

³³ For a recent general introduction to what “liberalism” has meant in the United States, see JONATHAN BELL & TIMOTHY STANLEY, *MAKING SENSE OF AMERICAN LIBERALISM* (2012). The understanding of New Deal liberalism used here is set out in ALAN BRINKLEY, *THE END OF REFORM: NEW DEAL LIBERALISM IN RECESSION AND WAR* (1995).

the right (for doing too much) and the left (for not doing enough), Eisenhower attempted to navigate a middle way that defaulted against changing the federal status quo at home.³⁴

There were two important departures from Eisenhower's small-federal approach, both important for air pollution. First, Eisenhower ordered the transformation of the existing Federal Security Agency ("FSA"), which held all of the federal government's domestic social programs, into a new federal Department of Health, Education, and Welfare ("HEW"). This resolved a long-running debate over whether the FSA should continue to exist and ended efforts to reduce the number of federal domestic programs running, which was why the FSA was not already a department to begin with. Among other things, the FSA, and then HEW, contained the largely independent U.S. Public Health Service ("PHS") – which would eventually run the federal government's air pollution program.³⁵

The second small-federal departure was Eisenhower's decision to enforce the court orders following *Brown v. Board of Education*.³⁶ The U.S. had failed spectacularly on its own terms with respect to civil rights for African Americans, officially in the segregationist South, and unofficially in the redlined north, but this internal tension was not something that Eisenhower was eager to resolve. His hand was forced by Judge Ronald N. Davies of the Eastern District of Arkansas, who issued an injunction, defied by the Arkansas governor, that led Eisenhower to send federalized National Guard troops to Little Rock. The action demonstrated the possibilities of national power at home, and made a deep impression on the Southern Democrats, who had written and submitted a "Declaration of Constitutional Principles," more commonly known as the Southern Manifesto, which principles included especially the reserved rights of the states from federal encroachment. Among the signatories of this document was Rep. Kenneth A. Roberts (D-AL), the chair of the Subcommittee on Health and Safety of the House Interstate and Foreign Commerce Committee (the "House Health and Safety Subcommittee"), whose support would be necessary to pass the Clean Air Act of 1963.³⁷

It is useful to understand the liberal order and the Eisenhower administration's moderate Republicanism – the acceptance of the New Deal state but resistance to further reform; the commitment to domestic welfare if only to demonstrate the value of capitalism over communism; and the tensions of the brewing civil rights battles and their meaning and import to other questions of federal government – to locate the currents of change that, against this prevailing paradigm, had closer bearing on the problem of pollution.

³⁴ On Eisenhower's governance philosophy, and opposition to his legislative programs by the right and left, see STEVEN WAGNER, *EISENHOWER REPUBLICANISM: PURSUING THE MIDDLE WAY* 121–24 (2006).

³⁵ On the history of the Federal Security Agency, see Mariano-Florentino Cuéllar, "Securing" the Nation: Law, Politics, and Organization at the Federal Security Agency, 1939–1953, 76 *UNIV. CHIC. LAW REV.* 587–718 (2009).

³⁶ *Brown v. Board of Education of Topeka*, 347 U.S. 483 (1954).

³⁷ For Eisenhower's decision on Little Rock, see William I. Hitchcock, *The Age of Eisenhower: America and the World in the 1950s*, Chapter 14 (2018). The Southern Manifesto is at 102 *Cong. Rec.* 4459–60 (Mar. 12, 1956).

2. Public Health – Postwar Institutions and Environmental Concerns

Of the many influences being brought to bear on government in the 1950s, the most important for air pollution was an evolving conception of public health, meaning the “[t]he science and the art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts for the sanitation of the environment . . . [and] the development of the social machinery which will ensure to every individual in the community a standard of living adequate for the maintenance of health.” Emerging from the “great sanitary awakening” of the early-middle nineteenth century, the subsequent discoveries in germ theory in the late nineteenth century, and the expansion of public health agencies throughout the Progressive Era, U.S. public health in the postwar period encompassed a huge array of health-related activities, from hospital operation, to quarantine services, to public education, to epidemic prevention, to programs for the eradication of infectious diseases. It also involved a great deal of research, and it was research that was to become the most important aspect of public health for air pollution.³⁸

The traditional institutional structure of U.S. public health reflected the nation’s federal structure, with offices for domestic wellbeing intentionally located with state and local governments, and federal power in the area rather strictly circumscribed. PHS was therefore allowed to assist state programs, but national (federal) public health activity was fiercely controversial. Efforts in the Roosevelt and Truman administrations to develop national health insurance programs fell to sustained opposition from the medical profession, which feared economic competition and, later, to anti-statists who associated national healthcare with socialist government. The primary exception to this general trend was medical research, federal funding for which benefited the medical industry without competing, and did not raise the specter of planned economies. The watershed in this area was the National Cancer Act of 1937, which founded the National Cancer Institute within PHS and set precedent by permitting the Surgeon General to award grants to non-federal researchers.³⁹

As was the case in other matters, World War II then exerted a major federalizing influence. The National Cancer Act research grant model expanded exponentially under FDR’s wartime Office of

³⁸ The classic definition of public health used here was given in CHARLES-EDWARD A. WINSLOW, *THE EVOLUTION AND SIGNIFICANCE OF THE MODERN PUBLIC HEALTH CAMPAIGN* 3 (1923), as quoted in MARY-JANE SCHNEIDER, *INTRODUCTION TO PUBLIC HEALTH* 4 (5th ed. 2017). On the “great sanitary awakening,” see CHARLES-EDWARD A. WINSLOW, *THE CONQUEST OF EPIDEMIC DISEASE; A CHAPTER IN THE HISTORY OF IDEAS* 236–66 (1943). On developments in germ theory, see ROBERT P. GAYNES, *GERM THEORY: MEDICAL PIONEERS IN INFECTIOUS DISEASES* 9–13 (2011). On Progressive Era public health, see 1 DONA SCHNEIDER & DAVID E. LILIENFELD, *PUBLIC HEALTH: THE DEVELOPMENT OF A DISCIPLINE* 579–682 (2008). The wide scope of U.S. public health activities as of World War II is examined in FITZHUGH MULLAN, *PLAGUES AND POLITICS: THE STORY OF THE UNITED STATES PUBLIC HEALTH SERVICE* 104–27 (1989).

³⁹ On the battles in the FDR and Truman administrations, see PAUL STARR, *THE SOCIAL TRANSFORMATION OF AMERICAN MEDICINE: THE RISE OF A SOVEREIGN PROFESSION AND THE MAKING OF A VAST INDUSTRY* 270–79 (1982). Efforts at national public health programs – particularly public health insurance – had been proposed and defeated repeatedly in the Progressive and early New Deal eras. *Id.* at 235–70. On the research grant program, see National Cancer Act of 1937, Pub. L. 244, 75 Stat. 559, §§ 1, 2(a, d), 4(c). (Aug. 5, 1937); Starr at 340.

Scientific Research and Development (OSRD), which, in addition to focusing on wartime technology, supported innovation to reduce medical casualties among the troops. PHS, for its part, was also at its core a military organization – a *Service*, led by a Surgeon *General* – and its work during World War II included many efforts to support domestic war production by promoting the health of the wartime workforce. In 1944, Congress expanded PHS’s health research mandate to non-cancer grant programs, and at the end of World War II the OSRD’s medical research responsibilities were transferred to PHS as well, expanding and consolidating a new and (for the time) quite massive peacetime public research program. This portfolio continued to grow throughout the 1950s, and by 1960 the NIH research budget had increased to \$400 million per year (\$3.5 billion in today’s dollars).⁴⁰

The federal medical research program was a robust platform for determining the cause of illness, with substantial support from politically powerful sectors. But the production of new knowledge is also an inherently political process, and while the health research program was not designed to challenge industrialism or capitalism – indeed it had evolved from the same administrative structures and incentives that had produced revolutions in chemical pesticides, the atomic bomb, and the Cold War aerospace industry – its work increasingly involved problems created by industry, and so had the potential to come into conflict with vested industrial interests. PHS’s solution to this political problem was to retreat behind claims of professionalism and scientific objectivity. Yet, PHS was under pressure to produce knowledge in response to a variety of influences against which it was never possible to remain entirely neutral. Although these pressures cannot necessarily be called “movements,” it is possible to identify and summarize a number of health-related advocacies focused on information generation that, taken together, can broadly be classified as “environmental health” activism.⁴¹

⁴⁰ For an early history of the U.S. Public Health Service, see RALPH C. WILLIAMS, *THE UNITED STATES PUBLIC HEALTH SERVICE, 1798-1950* (1951). For its wartime activities, see Annual Reports of the United States Public Health Service for the Fiscal Years 1941-42, 1942-43, House Doc. No. 437 (1943); Annual Report of the United States Public Health Service for the Fiscal Year 1944, House Doc. No. 2 (1944); and Annual Report of the Federal Security Agency for the Fiscal Year 1945 - Section Three: United States Public Health Service, House Doc. No. 415 (1945). OSRD was created by Executive Order 8807 (Jun. 28, 1941), pursuant to Proclamation of Unlimited National Emergency (May 27, 1941), and was headed by Vannevar Bush, author of the famed argument for federal support of basic research, VANNEVAR BUSH, *SCIENCE THE ENDLESS FRONTIER: A REPORT TO THE PRESIDENT* (1945). The research grant expansion was made in Public Health Service Act of 1945, Pub. L. 78-410, 58 Stat. 682 (Jul. 1, 1944), § 301(d) (authorizing grants to private organizations). See also STARR, *supra* note 39 at 340–42. On the expansion of the NIH research program through the 1950s, see *Id.* at 347. For comparison, today’s NIH research budget exceeds \$40 billion per year. NIH, *What We Do: Budget*, <https://www.nih.gov/about-nih/what-we-do/budget>.

⁴¹ On the social and political aspects of the production of knowledge, see BRUNO LATOUR & STEVE WOOLGAR, *LABORATORY LIFE: THE CONSTRUCTION OF SCIENTIFIC FACTS* (1986); SHEILA JASANOFF, *STATES OF KNOWLEDGE: THE CO-PRODUCTION OF SCIENCE AND THE SOCIAL ORDER* (2006). On PHS’s instrumental use of objectivity, see Christopher Sellers, *The Public Health Service’s Office of Industrial Hygiene and the Transformation of Industrial Medicine*, 65 *BULL. HIST. MED.* 42–73 (1991). On the origins of the environmental health movement, see KATE DAVIES, *RISE OF THE U.S. ENVIRONMENTAL HEALTH MOVEMENT* (2013).

Food safety was a prominent example. The federal government's role dated to the Pure Food and Drug Act of 1906, as significantly expanded during the New Deal. However, with the massive increase in pesticide use following World War II, food safety concerns in the 1950s expanded to include chemical toxicity, and Congress investigated pesticides in food and passed laws intended to limit their concentrations. While the FDA was the primary regulator, much of the information underlying this process came from PHS's National Cancer Institute.⁴² Another prominent example was radiation, a distinctly postwar environmental health concern. From 1951 to 1963, the United States regularly detonated nuclear weapons in New Mexico and Nevada, the world increasingly confronted the potential of radioactive fallout following nuclear warfare, and researchers were pushing forward to harness the atom to produce electricity. PHS, among other things, was called on to investigate illness in the fallout zone and track levels of Strontium-90 in milk.⁴³

PHS was also consistently drawn into disputes between labor and capital, and it was in the realm of "industrial hygiene" – now called occupational health – that PHS began to develop its expertise around lung conditions. PHS pioneered studies of silicosis (caused by inhalation of silica dust, common in mining and steel manufacture) and asbestos illnesses, among dozens of workplace studies it conducted throughout the postwar years. Also relevant to lung health, controversy, and industry interests, PHS was called upon to evaluate the emerging science on lung cancer, meaning it was repeatedly pulled into the highly charged world of tobacco politics.⁴⁴

With respect to pollution, by the 1950s PHS had been involved for decades. Public interest in clean drinking water equaled or exceeded that in clean food, and water filtration and chlorination practices

⁴² On the early legislation, *see* Pure Food and Drug Act of 1906, Pub. L. 59-384, 34 Stat. 768 (Jun. 30, 1906); JAMES HARVEY YOUNG, PURE FOOD : SECURING THE FEDERAL FOOD AND DRUGS ACT OF 1906 (1989). On the New Deal legislation, *see* Food, Drug, and Cosmetic Act of 1938, Pub. L. 75-717, 52 Stat. 1040 (Jun. 25, 1938); CHARLES O. JACKSON, FOOD AND DRUG LEGISLATION IN THE NEW DEAL (1970). On the 1950s pesticide amendments, *see* Pesticide Residues Amendment of 1954, Pub. L. 83-518, 68 Stat. 511 (July 22, 1954); Food Additives Amendment of 1958, Pub. L. 85-929, 72 Stat. 1784 (Sep. 6, 1958); Bruce S. Wilson, *Legislative History of the Pesticide Residues Amendment of 1954 and the Delaney Clause of the Food Additives Amendment of 1958*, in REGULATING PESTICIDES IN FOOD: THE DELANEY PARADOX 161–73 (1987). *See also* Color Additive Amendment, Pub. L. 86-618, 74 Stat. 397 (Jul. 12, 1960); Federal Hazardous Substances Labelling Act, Pub. L. 86-613, 74 Stat. 372 (Jul. 22, 1960); Franklin D Houser, *The Consumer's Sleeping Giant - The Federal Hazardous Substances Labeling Act*, 14 ST. CLARA REV 520 (1974).

⁴³ On fallout, *see* Toshihiro Higuchi, *Atmospheric Nuclear Weapons Testing and the Debate on Risk Knowledge in Cold War America, 1945–1963*, in J.R. McNeill & Corrina R. Unger, ENVIRONMENTAL HISTORIES OF THE COLD WAR (2010); Michelle Follette Turk, A HISTORY OF OCCUPATIONAL HEALTH AND SAFETY: FROM 1905 TO THE PRESENT 182-239 (2018); Carolyn Kopp, "The Origins of the American Scientific Debate over Fallout Hazards," 9 Social Studies of Science 403 (1979).

⁴⁴ For a general history of PHS's industrial hygiene division, *see* HENRY N. DOYLE, THE FEDERAL INDUSTRIAL HYGIENE AGENCY : A HISTORY OF THE DIVISION OF OCCUPATIONAL HEALTH, UNITED STATES PUBLIC HEALTH SERVICE (1975). On PHS's silicosis work, *see* Jacqueline K. Corn, *Historical Aspects of Industrial Hygiene—II. Silicosis*, 41 AM. IND. HYG. ASSOC. J. 125–133 (1980). On its asbestos industry and other industrial hygiene investigations, *see* Lewis J. Cralley, *Historical Perspectives: Industrial Hygiene in the U.S. Public Health Service (1914–1968)*, 11 APPL. OCCUP. ENVIRON. HYG. 147–155 (1996); Sellers, *supra* note 41. Although PHS would famously publish a report linking lung cancer to cigarettes in 1964, its involvement in the question dated back to the 1950s. *See* Mark Parascandola, *Cigarettes and the US Public Health Service in the 1950s*, 91 AM. J. PUBLIC HEALTH 196 (2001).

had been adopted nearly nationwide in the early twentieth century, overcoming the primary waterborne health threat – infectious disease. Raw sewage in drinking water sources was a public health threat, and the 1948 Federal Water Pollution Control Act included huge investments in sewage treatment facilities for that reason. PHS was also central to the most controversial drinking water issue of the 1950s: fluoridation of public drinking water systems. PHS had been a primary source of information about fluoride in drinking water since its discovery as an issue, had conducted the first test of public water supply fluoridation in 1945, had issued national policy in 1951, and had supported widespread public drinking water fluoridation throughout the 1950s.⁴⁵

In summary, the same processes that created increasing pollution also created a national public health research program that became drawn into ongoing debates over new chemical health threats. Given PHS's existing interests in determining the causes of cancer, and its occupational studies of lung ailments in workers, it should not be surprising that it also became involved in investigating the health impacts of outdoor air pollution. How exactly that happened is the subject of Section II, *infra*. What matters here is that PHS was generating information that was understood to be relevant to and even dispositive of questions of environmental health and was experienced at navigating the attendant politics. But it was not actively seeking to expand its authority into regulatory enforcement of air enforcement. That was the province of smoke abatement.

3. Smoke Abatement – Engineering and Irrelevance

In emerging environmental health fields, there were no directly competing regulatory structures for public health leaders to displace. Air pollution, on the other hand, was perhaps the *least* modern environmental health problem in the United States, and there was already a decades-old regulatory apparatus occupying the problem space, with a very different perspective on the definition of the problem and the available range of solutions. It was called “smoke abatement,” and it was the realm of engineers with expertise in combustion – particularly coal combustion. Understanding the development of national air pollution legislation circa 1960 requires examining the transformation of smoke abatement into “air pollution control,” and the gradual transference of the authority to define the air pollution problem space, away from mechanical engineers, to medical researchers.

Between the 1850s and 1940s, coal burning was the primary source of smoke in the United States, and thus the primary concern of smoke abatement. Coal was also, however, an essential input for the railroad, marine shipping, and steelmaking industries, and the primary fuel for home heating and small industrial boilers across the entire country. Coal smoke, then, meant industry, and U.S.

⁴⁵ While industrial water pollution was recognized as a problem, the question of industrial water pollution was *not* typically framed as a health matter. Although drinking water contamination was a primary target of public health agencies, through the 1950s the focus was on waterborne infectious disease and sewage treatment, but federal regulators shied away from framing the issue as a health problem, preferring to discuss industrial water pollution as a question of process inefficiency and the necessary conservation of a limited and valuable resource – fresh water.. MILAZZO, *supra* note 6. On the history of fluoridation and PHS's involvement, see <https://www.nidcr.nih.gov/health-info/fluoride/the-story-of-fluoridation>.

governments were more tailored to supporting that industry than reducing its impacts. They consequently developed a relatively congenial, forgiving, and ineffective cooperative approach to coal smoke abatement that, above all else, prioritized continuing to burn coal. Associations of mechanical engineers puzzled out how to do so as cleanly as possible, but the assumption was always that it was necessary to keep doing it. The challenge then, to the engineers, became how to educate operators of coal-fired equipment on the engineers' newly-developed best burning practices, and how to induce the coal-burning public and, perhaps, industry, to install equipment that would minimize the smoke from their coal fires. It should be noted that these were not engineering problems – they were rather problems of technology diffusion and public education. Smoke abatement was, then, a sort of “public engineering” program.⁴⁶

Unlike their colleagues in sanitary engineering, however, the smoke engineers were unable to develop a program of centralized treatment works that could attract federal funding and Congressional support. Smoke engineers appear to have taken as a given that government intervention was not appropriate to induce the technology transitions they desired. This was also the outlook of the primary federal agency involved in smoke abatement: the U.S. Bureau of Mines, which under its general authority to investigate health and safety of the mineral industries had become the primary national repository for information about smoke abatement. The Bureau assisted in the development of the nation's first model smoke ordinance in 1924, and the interests involved may be intuited from the members of the workgroup: the American Society of Heating and Ventilating Engineers, the Stoker Manufacturers' Association, and the Fuels Division of the American Society of Mechanical Engineers, together with, lastly, the American Civic Association (a municipal reform organization). The idea was to create a model local law that municipalities could adopt, because responsibility for such affairs was a local matter. Pointed toward improving coal furnace operation, the law's sole regulatory trigger was smoke opacity, using a tool called the Ringelmann Smoke Chart to determine smoke color, which became the foundation of most smoke abatement regulatory standards across the country for the next thirty years.⁴⁷

It still might have worked. Better equipment and processes had been developed, and it was possible to greatly reduce visible smoke and to capture other harmful components of flue gases. The challenge was that success required further government interventions in a system that was not well

⁴⁶ On smoke abatement generally, see Dale Grinder, *The Battle for Clean Air: The Smoke Problem in Post-Civil War America*, in *POLLUTION AND REFORM IN AMERICAN CITIES, 1870-1930* 83–103 (Martin V. Melosi ed., 1980). On the similarities between techniques in the 1890s and 1950s, compare Sidney Barwise, *The Abatement of the Smoke Nuisance*, 2 BR. MED. J. 499–501 (1890). with JOHN FERDINAND BARKLEY, *FUNDAMENTALS OF SMOKE ABATEMENT* (1950).

⁴⁷ On the first model ordinance, see Proposed Standard Smoke Ordinance, 46 MECH ENG. 302-08 (May 1924), as reported in BARKLEY, *supra* note 46 at 1–6. On the Ringelmann smoke chart, see Frank Uekoetter, *The Strange Career of the Ringelmann Smoke Chart*, 106 ENVIRON. MONIT. ASSESS. 11–26 (2005). Bureau of Mines publications on smoke abatement included OSBORN MONNETT, *SMOKE ABATEMENT* (1923); *SMOKE ABATEMENT: SELECTIONS FROM PAPERS BY O. P. HOOD* (1938); SARA J. DAVENPORT, *BIBLIOGRAPHY OF BUREAU OF MINES PUBLICATIONS DEALING WITH HEALTH AND SAFETY IN THE MINERAL AND ALLIED INDUSTRIES* (1946); BARKLEY, *supra* note 46. An explanation of the Bureau's perspective on this authority is provided in DAVENPORT, *supra* note at 1–2.

designed for them. To careful observers, this was clear the story in St. Louis, where, after unsuccessful efforts to make progress through education and voluntary action, the city had passed a law that controlled the quality of the coal that could be burned in the city, required mechanical combustion efficiency devices be to installed everywhere, and incorporated a successful enforcement program, rendering it “impossible to create smoke.” It was far more common for model smoke abatement ordinances to be adopted without ancillary controls on fuel or equipment, and then to be underenforced. Smoke abatement therefore failed repeatedly to resolve the problem it was designed to address.⁴⁸

Even as smoke abatement was failing to make progress, a new understanding of “pollution” was displacing the older idea of “smoke.” Smoke abatement, however, failed to expand its regulatory toolset or identify any criteria by which it could do so – a vacuum into which public health stepped. This was not for lack of understanding: as early as 1915 “smoke” could be found defined to include not only the visible byproducts of combustion, but its invisible gaseous and chemical components as well, at least to the extent that they were found to be objectionable by the public. But on what grounds could the public object, or could the government regulate? In a memorandum published posthumously in 1938, Bureau of Mines engineer O.P. Hood hit upon the tension:

In the present state of the art the medical profession does not furnish a clear definition of what constitutes a harmful atmosphere except in regard to very few things . . . Before threshold limits can be defined the objectionable characteristics of the quantities involved must be known. There is no unanimity of opinion on this matter and much remains to be learned. . . . It may be that it is sufficient for the present to fall back upon a less rational basis of definition. It may be enough to simply say “we don’t like it” . . . For the lack of a better basis at present we are compelled to recognize such an arbitrary basis for definition, *so that we define “smoke” as something accompanying combustion that the community does not like and define “abatement” as the reduction of the amounts involved to the point where the community will accept it.*⁴⁹

That is, as understandings of pollution grew, smoke abatement struggled to incorporate conceptions of what the public “does not like” beyond visible smoke, because it had no empirical basis for setting standards, even though the public manifestly “did not like” air pollution. Lacking its own contributions to helping the public define the parameters of acceptable air pollution, smoke abatement had no choice but to defer to public health to set the standards for public acceptability. As smog continued to plague U.S. cities throughout the 1950s, and public health research developed

⁴⁸ On St. Louis and Pittsburgh, see Raymond R. Tucker, *Smoke Prevention in St. Louis*, 33 IND. ENG. CHEM. 836–839 (1941); Joel A. Tarr, *Changing Fuel Use Behavior: The Pittsburgh Smoke Control Movement, 1940–1950*, 20 TECHNOL. FORECAST. SOC. CHANGE 331–346 (1981); JOEL A. TARR, *THE SEARCH FOR THE ULTIMATE SINK: URBAN POLLUTION IN HISTORICAL PERSPECTIVE* (1996).

⁴⁹ *Methods of Smoke Abatement in SMOKE ABATEMENT*, *supra* note 47. (at 3, emphasis added).

increasingly alarming information about air pollution's contributions to health problems, combustion engineers had increasingly little to offer.

In 1951, the Secretary of the Interior submitted an annual report to Congress summarizing the Bureau of Mines' research into the negative impacts of pollution. It was two pages devoted to explaining that the Department did not have the funds necessary to conduct such work: "Nevertheless, I am glad to report that with the very limited funds made available from its regular appropriation, the Bureau of Mines has rendered constructive service to the Nation in an advisory and consultative capacity," primarily by chairing an Interdepartmental Committee on Air Pollution, which produced little.⁵⁰

In the prevailing narration of air pollution control law, smoke abatement is often discussed as the predecessor to modern federal air pollution legislation. But the modern analogue to smoke abatement would be efforts to identify best available control technology for boilers and coal-fired power plants, an important but ultimately secondary element of a much larger program to monitor air quality, set ambient air quality standards, determine emission limits for a variety of pollutants, and create regulatory programs with teeth to enforce them. With respect to these efforts, smoke abatement was largely irrelevant. Others would take the lead.

4. The Urban Lobby – Visions of a New Federalism

In the 1950s, air pollution was almost universally understood to be a city problem, and therefore, in the parlance of the day's federalism, a "local" problem. This fact had profound consequences for the politics and legislation of air pollution in the early 1960s.

The New Deal had radically transformed the relationship between U.S. cities, states, and federal government, by ushering in an era of direct city-federal coordination that previously would have been unthinkable. Notwithstanding the federal expansions of the Wilson administration, prior to 1930 the federal budget was smaller than the collective state budgets – which were much smaller than the collective town and city budgets, where most domestic decisionmaking and spending occurred. The Great Depression, however, was not only a financial disaster for banks and their depositors – it was a financial disaster for states and municipalities, as they saw their tax revenue dry up at the same time the demand for their public financial relief programs increased, drastically. Rather than assist the states, however, the New Deal domestic agenda contemplated assisting the states' residents directly, even over the opposition of state governments concerned about this new federal intervention into domestic affairs. "Federal-city relations grew out of political necessity for bypassing, wherever possible, recalcitrant state officials and bureaucracies" to deliver New Deal aid

⁵⁰ REPORT OF THE DEPARTMENT OF INTERIOR PURSUANT TO AUTHORIZATION OF THE ACT OF AUG 14 1946 (1951). On the lack of impact of the 1951 Interdepartmental Committee, see A. J. Haagen-Smit, *Air Pollution: Proceedings of the United States Technical Conference on Air Pollution*, 116 SCIENCE 371 (1952). KARL BOYD BROOKS, *THE ENVIRONMENTAL LEGACY OF HARRY S. TRUMAN* 52–53 (2009).

to cities and their inhabitants, and this new arrangement elevated cities to a nearly equal, and rival, position with the states with respect to the federal government. By the end of World War II, the federal government's share in domestic spending had exceeded those of the states and municipalities combined, and municipalities had been poised to continue benefiting from this relationship when the more fiscally conservative Eisenhower administration reduced their access – if not their organizational capacities.⁵¹

These developments were the genesis of a powerful “urban lobby.” In the late nineteenth century, municipalities had formed municipal leagues in response to state bans on special legislation for cities, requiring laws of statewide municipal application, and therefore statewide municipal coordination. In 1924, ten existing state leagues established the American Municipal Association (AMA), which operated to share information and coordinate municipal advocacy first towards state governments, and later nationally. The AMA, in turn, assisted in the development of the United States Conference of Mayors (“USCM”), a coalition of the mayors of the nation's largest cities founded in 1932 to coordinate city-federal operations under the New Deal. As the crises of the Great Depression and World War II came to an end, the nation's federal government had more power than ever before to provide financial assistance to cities, and the USCM and, especially, the AMA, were intent on continuing to advocate for expansions to that support.⁵²

During the postwar period, however, cities were changing drastically, and this was leading to new demands. At the time, the suburb was the primary new physical development – an extension or expansion of the central urban core, a physical periphery where largely white, largely prosperous urban residents moved for a better standard of living, while still dependent on the urban core for employment, but no longer paying property taxes. As retailers and employers followed the suburbanites outwards, by the early 1960s economic and job growth was largely occurring outside of city centers. This had serious implications for cities themselves, which increasingly were drained of their tax bases and unable to function. Public perception had not, however, begun to re-characterize central cities as crime-ridden wastelands or the needful recipients of federal poverty programs. Rather, the “problems of the central cities were viewed as the byproducts of exuberant suburban

⁵¹ On the federal budget: RONALD SNELL, *STATE FINANCE IN THE GREAT DEPRESSION* at 2–3 (2009). On the transition from dual to cooperative federalism, and bypassing the states: DONALD H. HAIDER, *WHEN GOVERNMENTS COME TO WASHINGTON: GOVERNORS, MAYORS, AND INTERGOVERNMENTAL LOBBYING* 1, 20–21 (1974).

⁵² On the urban lobby, see ANNE MARIE CAMMISA, *GOVERNMENTS AS INTEREST GROUPS: INTERGOVERNMENTAL LOBBYING AND THE FEDERAL SYSTEM* 117–31 (1995); Raymond A. Mohl, *Shifting Patterns of American Urban Policy since 1900*, in *URBAN POLICY IN TWENTIETH-CENTURY AMERICA* (Arnold R. Hirsch & Raymond A. Mohl eds., 1993); DENNIS R. JUDD & FRANCIS N. KOPEL, *THE POLITICS OF AMERICAN CITIES: PRIVATE POWER AND PUBLIC POLICY* 319–58 (1979); HAIDER, *supra* note 51; DOUGLAS M. FOX, *THE NEW URBAN POLITICS: CITIES AND THE FEDERAL GOVERNMENT* (1972); Daniel J. Elazar, *Urban Problems and the Federal Government: A Historical Inquiry*, 82 *POLIT. SCI. Q.* 505–525 (1967); ROSCOE C. MARTIN, *THE CITIES AND THE FEDERAL SYSTEM* (1965). On municipal leagues: Bertram Johnson, *Associated Municipalities: Collective Action and the Formation of State Leagues of Cities*, 29 *SOC. SCI. HIST.* 549–574 (2005). HAIDER, *supra* note 51 at 6–15. On the creation of the USCM: *Id.* at 2–6.

growth, which left outmoded cores in need of redevelopment and physical refurbishing.” The new governing paradigm for the city-federal relationship would be “urban renewal.”⁵³

Urban centers had already been recognized as centers of need during the Great Depression. The Housing Act of 1937 had inaugurated a federal housing construction program, but this had generated a great deal of resistance from private real estate interests opposed to competition from public housing and desiring direct federal financial support for themselves instead. Thus the 1937 program had been unsuccessful, and programs originally developed for the direct government provision of affordable housing shifted, under the larger paradigm of Keynesian national economic policy, to federal investment for the purpose stimulating economic development. This led to the development of a national policy to “save the central city” by building a new economy around the razing and rebuilding of “blighted” urban areas, often meaning the homes of current residents. The Truman-era Housing Act of 1949, as amended during the Eisenhower administration, funded primarily commercial redevelopment in older city centers, with Philadelphia’s Penn Center and Pittsburgh’s Gateway Center complexes as influential models. By 1960, then, these programs, together with federal interstate highway development, were transforming previously mixed residential, commercial, and industrial city centers into central business districts. The urban lobby circa 1960 was interested in any opportunity to increase federal investment in this mode.⁵⁴

The urban lobby had been aware of air pollution as a problem for decades. The *American Municipal News*, the AMA’s periodical, had tracked smoke abatement ordinance innovations for years. By 1960, the urban lobby shared an interest in developing solutions to air pollution, an understanding that air pollution problems were shared nationally by similarly-situated cities, and an established system for requesting federal assistance for municipal problems. These would combine to drive the specific legislative proposal that became the Clean Air Act of 1963.

5. Conservatives – The Skeptical View

“Conservatism” in the United States is the subject of only slightly less spilled ink than “liberalism.” It famously challenges definition, in part because it is defined by its relation to other ideas, and in part because, at least in the United States in the postwar years, it was defined by struggles to define

⁵³ On financial structural challenges: CARL ABBOTT, *URBAN AMERICA IN THE MODERN AGE : 1920 TO THE PRESENT* 111–19 (1986). *See also* KENNETH FOX, *METROPOLITAN AMERICA : URBAN LIFE AND URBAN POLICY IN THE UNITED STATES, 1940-1980* 79–106 (1986).

⁵⁴ On New Deal understanding of municipal problems: FOX, *supra* note 53 at 81–89.(discussing Report of the National Resources Committee, Urbanism Subcommittee, *Our Cities, Their Role in the National Economy* (1937). Fox identifies the opposition to the Housing Act as led by the National Association of Real Estate Boards, on behalf of city residential real estate interests, and as part of a larger “long-standing conflict between the real estate interests and the progressive housing interests, including confrontation over zoning regulation, rent control, building codes, health regulation, building inspection, and landlord-tenant legal relations.” Fox at 89(discussing Guy Greer & Alvin Hansen, *Urban Redevelopment and Housing - A Plan for Post-War*, Nat’l Planning Assoc. Planning Pamphlets No. 10 (Dec. 1941)). Federal housing legislation: U.S. Housing Act of 1937, Pub. L. 75-412, 50 Stat. 888 (Sep. 1, 1937); Pub. L. 81-171, 63 Stat. 413 (Jul. 15, 1949). On Philadelphia and Pittsburgh: *Id.* at 94–99.

itself. For the purposes of this discussion, it suffices first to note that in the postwar United States there were “conservatives” in both the Republican and Democratic parties, and that in the Republican Party especially there was a transition from the “old guard” conservatism that had dominated since about 1912, personified particularly by Sen. Robert A. Taft (R-OH), to a “new” and more populist postwar (and Cold War) conservatism personified by Sen. Barry Goldwater (R-AZ). The conservative elements of both parties formed governing coalitions in Congress, with varying degrees of cooperation and success. From within this diverse group of interests and ideologies emerged three related, overlapping, and self-reinforcing, but distinct, broadly “conservative” consensus ideas that would be very relevant to air pollution control: fiscal conservatism, anti-statism, and support for capitalism.⁵⁵

Fiscal conservatism may be defined as “an agenda of balanced budgets, private capital investment, minimal government debt, stable currency, low inflation, . . . high savings,” and low taxes.⁵⁶ Even in the 1930s, the ideologies behind these policies were varied, but in government fiscal constraint was understood both to be popular among the tax-paying electorate, and important to policymakers concerned about the “detrimental impact of deficits on consumer prices, national savings, and the international stability of the dollar,” and with “restoring healthy economic conditions, constraining the state, limiting interest groups, and retaining the faith of citizens in a disciplined government.”⁵⁷ Although fiscal conservatism found support in both parties, Republicans were especially devoted to it, and it was an essential element of the 1952 Republican Party platform, which required consensus-building between the isolationist Taft and internationalist Eisenhower factions (who won). Eisenhower himself was an enthusiastic budget hawk. Federal spending would constantly require justification.⁵⁸

Anti-statism may be defined as “the body of ideas and arguments used by those who have opposed efforts to increase the size and strength of the executive branch of the federal government” in the

⁵⁵ See generally, Michael Kimmage, *The Historiography of Twentieth-Century American Conservatism in Oxford Bibliographies* (2014). On Robert Taft’s life and work, see JAMES T. PATTERSON, *MR. REPUBLICAN; A BIOGRAPHY OF ROBERT A. TAFT* (1972). On Barry Goldwater’s, see ROBERT ALAN GOLDBERG, *BARRY GOLDWATER* (1995). On the “conservative coalition” in Congress, see JAMES T. PATTERSON, *CONGRESSIONAL CONSERVATISM AND THE NEW DEAL* (1967). For a current sociological definition, see Neil Gross, Thomas Medvetz & Rupert Russell, *The Contemporary American Conservative Movement*, 37 *ANNU. REV. SOCIOLOG.* 325–354 (2011).

⁵⁶ Julian E. Zelizer, *The Forgotten Legacy of the New Deal: Fiscal Conservatism and the Roosevelt Administration, 1933-1938*, 30 *PRES. STUD. Q.* 332–359, 333 (2000).

⁵⁷ *Id.* at 334.

⁵⁸ On Taft’s efforts to lead the Republican Party toward fiscal conservatism, see MICHAEL D. BOWEN, *THE ROOTS OF MODERN CONSERVATISM: DEWEY, TAFT, AND THE BATTLE FOR THE SOUL OF THE REPUBLICAN PARTY* (2011). CLARENCE E. WUNDERLIN, *ROBERT A. TAFT: IDEAS, TRADITION, AND PARTY IN U.S. FOREIGN POLICY 184–85* (2005). On the guiding “political economy” of Eisenhower’s presidency, including the underlying reasons for his fiscal conservatism, the classic study is Robert Griffith, *Dwight D. Eisenhower and the Corporate Commonwealth*, 87 *AM. HIST. REV.* 87–122 (1982). For a political history of the Eisenhower administration’s efforts to balance the budget, see IWAN W. MORGAN, *EISENHOWER VERSUS “THE SPENDERS”: THE EISENHOWER ADMINISTRATION, THE DEMOCRATS AND THE BUDGET, 1953-60* (1990). The Taft-Eisenhower primary is examined by Patterson and in WILLIAM I. HITCHCOCK, *THE AGE OF EISENHOWER: AMERICA AND THE WORLD IN THE 1950S* (2018).

United States.⁵⁹ Although anti-statism is associated with conservative politics, the resistance to centralized national power is one of the U.S. Constitution's defining characteristics: the country survived without a strong centralized national government for over a century and half. The "marked anti-statist bias" in American government did not disappear even after the World Wars and the Great Depression posed enormous challenges to adherents of this doctrine. Furthermore, anti-statism served vested interests:

Postwar opposition to the growth of governmental power was also, in some cases, merely a by-product of self-interest, rather than the result of any serious attempt to establish what was best for the country as a whole. . . . Principled postwar anti-statists . . . were often motivated by other beliefs Many southern Democrats who favored "states' rights" and a weaker government in Washington were also, not coincidentally, racists; some midwestern Republicans who wanted lower taxes, less federal regulation, and a smaller defense budget were also, as a result, isolationists.⁶⁰

What is especially important is that in U.S. politics, appeals to anti-statist principles have always been powerful, and this was especially the case in a time when the nation's entire identity was being transformed in contrast to both authoritarian fascism and world communism. Government initiatives, however well intentioned, would be subject to anti-statist review.

Finally, U.S. fiscal conservatism and anti-statism overlapped with a marked pro-capitalist outlook in U.S. society and government. While *laissez-faire* political economy did not have its roots in the U.S. Constitution to the same degree as did anti-statism, by the early twentieth century the ideal was well established. Business interests, of course, promoted capitalism. But by the postwar years free-market capitalism had also found strong intellectual proponents looking for an alternative to socialism as a set of organizing principals for a good society and government. While the degree to which the government should be involved in promoting capitalism was debated, capitalism itself was increasingly associated with the United States itself, and reform efforts intended to constrain business operations were, increasingly, opposed for no other reason than what was bad for business was bad for the United States. This was the upshot of, for example, the 1937 "conservative manifesto," and it would become a strong political organizing force in business circles, including, as is particularly relevant to air pollution, the National Association of Manufacturers.⁶¹

It would be circular to define all opposition to federal air pollution control legislation as "conservative," simply because such federal power had never existed before, and therefore any

⁵⁹ AARON L. FRIEDBERG, IN THE SHADOW OF THE GARRISON STATE: AMERICA'S ANTI-STATISM AND ITS COLD WAR GRAND STRATEGY 11 (2012). This discussion follows the excellent analysis of U.S. anti-statist traditions in *Id.* at 9–33.

⁶⁰ FRIEDBERG, *supra* note 59 at 6.

⁶¹ The interaction between pro-capitalist political interests and federal intervention is explored in detail in PHILLIPS-FEIN, *supra* note 5. Of particular interest, Phillips-Fein covers the American Liberty League and the National Association of Manufacturers in detail. On the "conservative manifesto," see John Robert Moore, *Senator Josiah W. Bailey and the "Conservative Manifesto" of 1937*, 31 J. SOUTH. HIST. 21–39 (1965).

effort to create it was “reformist” or “progressive,” and thus any effort to oppose it could be said to be “conservative” or even “reactionary.” Rather, there were a number of pre-existing conservative principles that became implicated when new programs were proposed. These were not absolutes, and for examples of conservatives supporting new federal pollution control programs one need look no further than Robert A. Taft himself, who co-sponsored the 1948 Federal Water Pollution Control Act. But Taft was also considered among his more conservative colleagues to have been becoming increasingly soft on social programs. What is clear is that, as advocates for air pollution control began their work, they would be required to confront and overcome skepticism, justify their programs, and seek to build legitimacy among a broad set of often conflicting interests that, in the aggregate, may be understood as conservative.

6. Other Interests

Many other elements of U.S. society had a stake in the outcome of air pollution discussions. However, very few of them took any significant action to create the Clean Air Act of 1963. Before moving to legislative history, several of the most important deserve brief explanation.

The Conservation Movement. The conservation movement played no significant role air pollution advocacy in the 1950s and early 1960s. As explained above, the air pollution problem had become the special concern of the “urban lobby,” and conservation at the time was focused on the development and protection of wilderness and other scenic resources. “They focused on regional or place-specific issues, looking at the mountains instead of the cities, at the so-called pristine places instead of the communities where people lived.”⁶² The Sierra Club’s move toward a more “environmental” perspective that could encompass air pollution has been dated to 1963 and the Diablo Canyon controversy.⁶³ Thus, the only conservation organization to comment on the Clean Air Act of 1963 was the National Wildlife Federation, which did so only after its input was requested by the House Health and Safety committee. The organization’s own newsletter barely mentioned air pollution between 1955 and 1963.⁶⁴ Although members of the Izaak Walton League and other organizations could occasionally be found making positive statements at the local level, this did not reflect an organizational commitment to the issue.

⁶² HAL ROTHMAN, *THE GREENING OF A NATION?: ENVIRONMENTALISM IN THE UNITED STATES SINCE 1945* 17 (1998).

⁶³ Susan R. Schrepfer, *The Nuclear Crucible: Diablo Canyon and the Transformation of the Sierra Club, 1965-1985*, 71 CALIF. HIST. 212–237 (1992).

⁶⁴ Public Hearings Scheduled on Pollution Control Bill, 20:8 *Conservation News* 1 (April 15, 1955); Senate Hearings on Water and Air Pollution Control Bills, 20:9 *Conservation News* 6 (May 1, 1955); Senate Fails to Restore Water Pollution Control Cut, 20:12 *Conservation News* 6 (June 15, 1955); NWF Announces New Fellowship Policy, 21:19 *Conservation News* 12 (Oct. 15, 1956); Air Pollution Conference Is Scheduled, 23:16 *Conservation News* 7 (Aug. 15, 1958); Air Pollution Problem Gets More Attention, 24:18 *Conservation News* 12-12 (Sep. 15, 1959); Air Pollution Control, 28:22 *Conservation News* 5 (Dec. 1, 1963).

Women's Groups. Early air pollution legislation has been credited to coalitions of “middle-class women's groups, public health officials, and physicians.”⁶⁵ It is true especially that the League of Women Voters contributed to early environmental action, and that women's contributions to environmentalism generally are understudied. However, there is little evidence that the League was particularly active in air pollution during this time. The one major exception is the Pittsburgh chapter, which was one of the major players in the coordination of that city's smoke abatement program.⁶⁶ But this was not replicated elsewhere, and the League never appears in efforts to promote federal air pollution control at this time.

Civil Rights Advocates. The groups and interests who would lead the Civil Rights Movement were focused on federal legislative action, but not for air pollution. Although disparate environmental health burdens were a discernable and occasionally commented-upon aspect of racialized housing segregation patterns during the 1950s and early 1960s, the framework of environmental justice, or environmental racism, was not yet developed and was not a locus of advocacy or activism at this time.⁶⁷

Business. “Business” cannot be treated as monolithic, and business involvement in air pollution typically mapped to sectoral interests. For example, the cigarette industry was a somewhat surprising early advocate for air pollution investigation – because if ambient air pollution was shown to contribute to lung cancer, it provided an alternative explanation to the cigarette theory of causation. Retail businesses operating in urban centers would benefit from “urban renewal” programs, but manufacturers creating the pollution would not. Nor would those producing the inputs that drove those industries – including especially coal – benefit. Those who developed better pollution control devices did.

In summary, then, the postwar years in the United States were a time of great change in ideas about government, related to but different from the changes of the 1960s that are most often associated with environmental law. These changes had their origins in the past, and particularly in the experiences of the New Deal and World War II and were in tension especially during the Eisenhower administration. They would find expression in the debate over federal air pollution control law between 1948 and 1963 – the Subject of Part II.

⁶⁵ Daniel Faber & James O'Connor, *The Struggle for Nature: Environmental Crises and the Crisis of Environmentalism in the United States**, 1 CAPITAL. NAT. SOCIAL. 12–39, 13 (1988).

⁶⁶ Tarr, *supra* note 48.

⁶⁷ See J. Merritt McKinney, *Air Pollution, Politics, and Environmental Reform in Birmingham, Alabama* (Oct. 2011) (Ph.D. dissertation, Rice University Dept. of History).

II. The Development of the Clean Air Act of 1963

Part I examined the social and political forces relevant to the air pollution problem in the postwar United States. Part II explores how those forces influenced the federal government's response.

Section A examines how PHS was first recruited to investigate outdoor air pollution in Donora, Pennsylvania, and how the agency balanced the political interests at play there. Section B explores PHS's air pollution work between 1949 and 1958, and the rising Congressional debate, and conservative concern, over the appropriate role of the federal government in air pollution. Sections C through F then examine the debate over whether to expand the federal government's authority to include any sort of independent power to reduce air pollution. Section C examines the seminal proposal by HEW Secretary Arthur S. Flemming in late 1958, and traces how that proposal was delayed in Congress through 1960. Section D examines the transition to the Kennedy Administration and the lobbying by the American Municipal Association that created key textual elements of the eventual bill in 1961. Section E examines the plans to enact a relatively moderate bill in 1962, the key decision to delay that enactment for a year, and the emergence of open conflict over the question of federal enforcement by the end of the year. Section F then examines the pivotal year of 1963, with particular attention to public hearings in the House and Senate, and the votes that led to the law's eventual passage and signing in December 1963.

A. 1948-1949: Donora

As explained in Part I, federal engagement with air pollution as a health issue can be traced back to early work on smoke abatement by the U.S. Bureau of Mines, and early investigations into lung health by PHS's Industrial Hygiene Division. But the public debate over whether and how to increase the federal role in the air pollution field can be traced to Donora, Pennsylvania – an industrial town outside Pittsburgh. In the last week of October 1948, the town was beset by a toxic smog that killed 20 people. The disaster made national news.⁶⁸

In Donora, calls for a federal investigation into the smog disaster began almost immediately, and were always intertwined with questions of liability. Although suspicions in the town immediately fell on its major industrial facility – U.S. Steel's Donora Zinc Works – it was not clear who could be trusted to investigate these allegations. In the usual course of events at the time, local, county, and state public health officers specializing in industrial hygiene would investigate, and they did arrive quickly at the scene in Donora. But by the time they had come, the killing smog had gone, meaning there was little evidence left to examine, and the investigators hesitated to blame the zinc works without proof. U.S. Steel also proposed an investigation by an independent outside consultant but,

⁶⁸ On the general facts of the Donora incident, see Elizabeth T. Jacobs, Jefferey L. Burgess & Mark B. Abbott, *The Donora Smog Revisited: 70 Years After the Event That Inspired the Clean Air Act*, 108 AM. J. PUBLIC HEALTH S85–S88 (2018). For the classic contemporary telling, see Berton Roueché, *The Fog*, THE NEW YORKER, 1950, <https://www.newyorker.com/magazine/1950/09/30/the-fog> (last visited May 27, 2020).

given its obvious conflict of interest, it was not well trusted. In the town, nearly everyone relied on the plant for employment, but they were unionized – and six of the seven town councilmen were union members. In the immediate aftermath, the town therefore held a public meeting to discuss what should be done. At that meeting, two prominent figures – Donora Public Health Board member Dr. William Rongaus, who had been quoted repeatedly as likening the deaths in Donora to “murder” by the zinc works, and Frank Burke, the Pittsburgh steel union director and recently appointed chair of its national committee on worker safety – called for the town to recruit PHS to serve as a neutral investigator into the causes of the deaths. The town council accepted this proposal and immediately sent PHS a request for assistance.⁶⁹

Although PHS had a long history investigating health issues related to industrial facilities, it was also sensitive to the politics of federal intervention and bound by rules relating to state assistance, and so was not immediately eager to volunteer itself in Donora. Upon receiving the town’s message, PHS responded that it was required to wait for the appropriate request from state (not local) authority. Such an invitation, however, was not immediately forthcoming, and in the meantime PHS employees speculated publicly that local meteorological conditions had likely been to blame – not local industry. It was not until several days later that both Pennsylvania and PHS agreed that PHS should be involved, and PHS, represented by the head of its industrial hygiene division, agreed to travel to Donora to conduct an investigation, but only by setting up monitoring stations in the valley to study the air, in the event that the fatal circumstances repeated themselves after the zinc plant reopened. Over the following weeks, PHS staff began arriving in Donora. The town, then, had gotten what it asked for – but under conditions that did not commit PHS to a health investigation of the industrial facility’s emissions specifically.⁷⁰

⁶⁹ On the early positioning over liability at Donora, see Lynne Page Snyder, “*The Death-Dealing Smog over Donora, Pennsylvania: Industrial Air Pollution, Public Health Policy, and the Politics of Expertise, 1948-1949*,” 18 ENVIRON. HIST. REV. 117–139 (1994). On the Pennsylvania Health Department investigation and the U.S. Steel proposal to recruit the “Independent Hygiene Corporation,” see *Chemists Study Fatal Smog At Donora, Pa.*, THE EVENING SUN, Nov. 1, 1948, at 2. NB: the “Independent Hygiene Corporation” does not appear in Pennsylvania corporate records and is not otherwise mentioned in local newspapers of the time, and so may be a misreported name. On the state of distrust and statements made at the Donora public meeting, see generally Snyder, *supra* note., and see Troy Gordon, *U.S. Scientists Asked To Help Solve Mystery of “Death Smog,”* LUBBOCK MORNING AVALANCHE, Nov. 2, 1948, at 1; Orlo Robertson, *Donora Asks Federal Check of “Poison” Air*, THE AKRON BEACON JOURNAL, Nov. 2, 1948, at 35; *Ask For Air Survey Over Smog Area*, LANCASTER EAGLE-GAZETTE, Nov. 2, 1948, at 1; *Doctor Calls Fatal Smog Paralyzing*, THE COURIER-JOURNAL, Nov. 2, 1948, at 11; *Donora Appeals To Federal Health Bureau for Aid*, THE DAILY CLINTONIAN, Nov. 2, 1948, at 1; *Donora Asks U.S. To Probe Plague*, THE PITTSBURGH PRESS, Nov. 2, 1948, at 1; *Traces of Poison Gas Found in Smog By State Prober of Donora Death Wave*, DEMOCRAT AND CHRONICLE, Nov. 2, 1948, at 3. On Frank Burke’s background, see *Wildcat Strike Shuts J&L Mill, 8500 Men Idle*, THE PITTSBURGH PRESS, Feb. 22, 1945, at 1; *CIO Steelworkers of America Will Meet in New Castle Aug. 7-8*, THE NEWS-HERALD, Jul. 31, 1948, at 2.

⁷⁰ PHS’s investigatory portfolio can be traced through its annual reports to Congress, submitted by the Surgeon General pursuant to PHS authorizing legislation between 1902 and 1952 – as can its combined scientific, causal investigatory, pollution control, and industry oversight missions. For the division’s activities in 1948, see also Statement of Dr. Leonard A. Scheele, Surgeon General, in Hearings before the House Appropriations Committee, *Department of Labor, Federal Security Agency Appropriations for 1951*, at 267-68 (1950). On the initial responses to Donora’s request to PHS, see *Clean-Up*

The investigation took nearly a year, and PHS submitted its report in mid-October 1949. As had been presaged in its early comments and study design, its work focused almost entirely on meteorological and topographical contributors to the deadly incident and did not attempt to trace the deaths to the town's major industrial facility. The report concluded that the "Donora Smog episode of October 25–31, 1948, was an extreme case of the 'smoky morning' type," i.e., a typical temperature inversion that had trapped the town's typical smog in the local valley, just to a greater than normal degree. The report did recommend that the town reduce local air pollutants but focused much more on a proposed weather monitoring network to forecast future dangerous inversions in time to warn the public. If Donora's residents had been holding out hope for causal findings to support lawsuits against U.S. Steel, they were disappointed.⁷¹

PHS, however, had just gained a great deal of public exposure in the air pollution space and, perhaps, an opportunity for more. And above all else, the PHS report recommended further research: "Our first step now, of course, is immediate basic research. We need to investigate for instance, what long range effect continued low concentrations of polluted air has on the health of individuals. . . . *When we find the answers to all of these unknowns, we can proceed to the problem of eliminating the causes.*"⁷² This was not a model statement of the precautionary principle, and it was not necessarily

of Air in Industrial Areas Suggested, Health Service Aid to Donora Delayed by Election Day, THE TOWN TALK, Nov. 3, 1948, at 9. On the further delay, see *Hope for Federal Probe Of Fatal Smog Stymied*, THE MERCURY, Nov. 3, 1948, at 13. On the initial PHS statements on cause, see Edwin F. Brennan, *Zinc Plant Is Absolved In Deaths*, PITTSBURGH POST-GAZETTE, Nov. 5, 1948, at 1; *No Incriminating Evidence on Any One Donora Mill*, ST. LOUIS POST-DISPATCH, Nov. 5, 1948, at 32. On the PHS agreement to investigate, see *Steelworkers Give \$10,000 to 'Prove Donora Death Smog*, THE MORNING HERALD, Nov. 6, 1948, at 14; *Donora, Pa., Becomes Laboratory To Avert Further Fatal Smogs*, THE ST. LOUIS STAR AND TIMES, Nov. 5, 1948, at 2; *Air Pollution Probe*, THE PITTSBURGH PRESS, Nov. 20, 1948, at 8; *Check on Smog Is Ordered*, AMARILLO DAILY NEWS, Nov. 5, 1948, at 15. On the growing PHS involvement, see *Air Pollution Probe*, *supra* note; *Donora's Deaths Studied Again*, THE INDIANA GAZETTE, Nov. 20, 1948, at 12; *U.S. To Probe Smog Deaths At Donora*, THE PLAIN SPEAKER, Nov. 20, 1948, at 15; *Four Inquiries Hunt Source of Donora Deaths*, THE PITTSBURGH PRESS, Nov. 21, 1948, at 2; *The "Federalists" Move In*, THE PITTSBURGH PRESS, Nov. 21, 1948, at 18; *Donora Death Probers Meet*, THE PITTSBURGH PRESS, Nov. 23, 1948, at 9; *House-to-House Smog Survey To Start Early Next Week in Donora*, THE DAILY REPUBLICAN, Nov. 24, 1948, at 1; *U.S. Study of Air at Donora, Pa., to Start Next Week*, ST. LOUIS POST-DISPATCH, Nov. 26, 1948, at 3; *May Take Year In Donora Probe*, REPUBLICAN AND HERALD, Dec. 1, 1948, at 2; *Staff Of U.S. Public Health Service Specialists Open Donora Smog Probe*, THE DAILY REPUBLICAN, Dec. 1, 1948, at 1; *Federal Probers Arrive in Donora*, THE PITTSBURGH PRESS, Dec. 3, 1948, at 2. For PHS's description of how it became involved, see PHS, *Annual Report of the Federal Security Agency 1949: Public Health Service*, 109-10 (1949). The internal and cross-agency discussions that resulted in both the State of Pennsylvania and PHS agreeing that PHS should come to Donora have not been studied.

⁷¹ For the progress of the Donora investigation, see *Donorans To Get Preliminary Report On Smog Probe Tomorrow*, THE DAILY REPUBLICAN, Feb. 8, 1949, at 1; *Donora Report Due Tuesday*, THE PITTSBURGH PRESS, Apr. 22, 1949, at 30; *PHS Field Group Back in Donora*, THE DAILY REPUBLICAN, Sep. 20, 1949, at 1; *U.S. Renews Probe of Fatal Donora Smog*, LANCASTER NEW ERA, Sep. 22, 1949, at 26; Paul F. Ellis, *Blanket of Death at Donora Described by Health Service*, THE CAPITAL JOURNAL, Oct. 18, 1949, at 19. The final report is H.H. SCHRENK ET AL., AIR POLLUTION IN DONORA, PA: EPIDEMIOLOGY OF THE UNUSUAL SMOG EPISODE OF OCT. 1948 (1949). For its conclusions, see *id.* at 147. For its recommendations, see *id.* at 164. For a critique of its failure to assign any responsibility to the sources of the pollutants, see Snyder, *supra* note 69. The internal politics of the report have not been studied.

⁷² Foreword by Leonard A. Scheele, Surgeon General, SCHRENK ET AL., *supra* note 168 at iii.(emphasis added). To date, no research has been done on how PHS viewed opportunities presented by a possible federal research program.

the case that it was necessary to answer all medical research questions before turning to the task of eliminating pollution's causes. But that was what PHS proposed to do.

B. 1949-1958: Early Debate on the Federal Role

Following Donora, at least twenty-five other cities requested that PHS investigate air pollution within their borders. For several years, PHS conducted what research it could under whatever authorities and budget authorizations it could muster, while interested members in Congress sought to expand PHS's budget authorization with a specific air pollution research program, under the watchful and often skeptical review of fiscal conservatives concerned with federal budget growth, and anti-statist conservatives concerned with federal government growth generally. During this time, no distinction was made between PHS "research," "surveys," or "investigations," and the work often had political implications that could not be avoided.

Without a specific Congressional authorization, PHS pursued air pollution in at least three ways in the latter years of the Truman administration. First, it advised states on technical matters under its state services authority. Second, it began to study air quality conditions in the Detroit-Windsor area at the behest of the International Joint Commission, a U.S.-Canadian international border commission with clear federal jurisdiction. Third, under its water pollution authorities, PHS had received funding to construct a sanitary engineering center in Cincinnati, Ohio, which was intended to house its water pollution research activities – and it consolidated its air pollution research work there as well. Congressional budget overseers inquired into these activities in 1950, 1951, and 1952, and were most concerned that Canada pay its fair share of the costs for the international investigation.⁷³

The first legislative proposals came in the same week that the PHS's Donora report was released. Two Congressmen from the Donora area submitted identical bills stating that the PHS study had

⁷³ Regular reports on PHS air pollution activities were provided to Congress by the Federal Security Agency until the FSA was transformed into HEW. *See* ANNUAL REPORT OF THE FEDERAL SECURITY AGENCY 1949: PUBLIC HEALTH SERVICE at 109–110 (1949); ANNUAL REPORT OF THE FEDERAL SECURITY AGENCY 1950: PUBLIC HEALTH SERVICE at 56 (1950); ANNUAL REPORT OF THE FEDERAL SECURITY AGENCY 1951: PUBLIC HEALTH SERVICE at 44 (1951); ANNUAL REPORT OF THE FEDERAL SECURITY AGENCY 1952: PUBLIC HEALTH SERVICE at 51 (1952). For Congressional (often rather skeptical) inquiry into PHS budget requests for air pollution work, *see Department of State Appropriations for 1951: Hearings before the House Appropriations Committee*, at 980-84 (1950); *Departments of State, Justice, Commerce and the Judiciary Appropriations for 1951: Hearings before the Senate Appropriations Committee*, at 848-52 (Apr. 12, 1950); *Departments of State, Justice, Commerce and the Judiciary Appropriations for 1951: Hearings before the Senate Appropriations Committee*, at 848-51 (Apr. 12, 1950); *Department of Labor – Federal Security Agency Appropriations for 1952: Hearings before the House Appropriations Committee*, at 582 (Feb. 23, 1951); *Department of State Appropriations for 1952: Hearings before the House Appropriations Committee*, at 529-30 (Mar. 6, 1951); *Labor – Federal Security Agency Appropriations for 1952: Hearings before the Senate Appropriations Committee*, at 650 (Apr. 25, 1951); *Departments of State, Justice, Commerce, and the Judiciary Appropriations for 1952: Hearings before the Senate Appropriations Committee*, at 1537-38 (1951). The Cincinnati center was authorized by the Federal Water Pollution Control Act of 1948, § 8(c), Pub. L. 80-845, 62 Stat. 1155, 1159 (Jun. 30, 1948). Its construction was explained in detail in *Independent Offices Appropriations for 1951: Hearings before the House Appropriations Committee*, at 2246-51 (Feb. 27, 1950) (statement of Rep. Charles H. Elston); and its use for air pollution at *Departments of Labor and Health, Education, and Welfare Appropriations for 1955: Hearings before the House Appropriations Committee*, 168-69 (Apr. 2, 1954).

“revealed for the first time that smog . . . can cause serious acute disabling diseases . . .” and proposing to direct \$750,000 (\$8 million today) to PHS to “conduct research into the health hazards of air pollution and to determine the long-range and chronic, as well as the acute, effects of air pollution, and also to establish specific engineering preventive and control measures for eliminating the dangers of air contamination.” In other words, the proposals framed PHS’s mission as medical research into the basic causes of disease. However, the bills also proposed to expand PHS’s research into technological research and development traditionally dominated by smoke abatement engineers and outside the expertise of the PHS staff then working on air pollution. The bills did not escape committee in 1949.⁷⁴

Whatever the reason for failure in 1949, the idea for a federally funded air pollution research program returned in 1950 and 1951, with tensions unresolved between PHS’s possible investigatory, basic research, and abatement missions. The first 1950 proposal was identical to those submitted in 1949, but now promoted by Staten Island representative James J. Murphy, who appears to have been squarely focused on PHS’s investigatory role, as he expressed frustration that his constituents could not secure a local PHS inquiry into air pollution coming from New Jersey. Later in the year, a different proposal came from Rep. Helen Gahagan Douglas (D-CA), who at the time was engaged in a fierce Senate campaign against then-Representative Richard M. Nixon (R-CA) in a state that was increasingly concerned about air pollution. Rep. Douglas appears to have been focused on nationalizing some of the costs of California’s ongoing air pollution research, and her remarks defended federal involvement in the field in part by arguing that basic research was expensive for one state alone to undertake and would have widespread national benefit. While Murphy’s proposal repeated the combined medical and technological research goals contained in the prior year’s bills, Douglas’s bill innovated by splitting the research work between the Bureau of Mines, which would investigate prevention and control technologies, and PHS, which was to conduct a three-year investigation into health effects – leaving states like California with the existing responsibility to develop and run regulatory programs. Again, however, these proposals did not escape committee and so died permanently at the end of the 81st Congress in 1950.⁷⁵

⁷⁴ H.J. Res. 379, 81st Cong. (Eberharter, D-PA) (Oct. 14, 1949) (to provide for research into the health hazards of air pollution); H.J. Res. 380, 81st Cong. (Kelley, D-PA) (Oct. 14, 1949) (same), referred to House Commerce Committee 95 Cong. Rec. 14,630 (Oct. 15, 1949). Bailey speculates that these legislators were engaging in “symbolic politics” and submitted these bills primarily to satisfy constituents and claim credit, a cynical interpretation based on the (true) fact that they did not resubmit their bills in the following Congresses. BAILEY, *supra* note 4 at 89. Other explanations, however, are also consistent with this evidence. Further research into who wrote the bills, how PHS was involved, and why the Congressmen submitted the bills would be useful, as would a review of why the bills did not see a vote.

⁷⁵ H.J. Res. 416, 81st Cong. (Murphy, D-NY) (Feb. 8, 1950), referred to House Commerce Committee 96 Cong. Rec. 1696 (Feb. 8, 1950), with introductory remarks at 96 Cong. Rec. 3486 (Mar. 16, 1950), and related extended remarks at 96 Cong. Rec. A2006 (Mar. 16, 1950); H.R. 9379, 81st Cong. (Douglas, D-CA) (Aug. 9, 1950), referred to House Commerce Committee 96 Cong. Rec. 12,143 (Aug. 9, 1950), with related extended remarks at 96 Cong. Rec. A5733 (Jul. 10, 1953). Again, Bailey ascribes cynical motive to Rep. Douglas, who he claims without evidence was “[p]rompted by the need to find a popular issue to boost her flagging campaign against Richard Nixon for a vacant U.S. Senate seat.” *Id.* at 91. Again, this motive is possible, and it is probably fair to assume that all of Rep. Douglas’s legislative activity in mid-

In 1951, at the beginning of the 82nd Congress, Rep. Murphy re-submitted his prior bill, and two months later submitted a new proposal that incorporated the joint PHS-Bureau of Mines research structure originally proposed by Rep. Douglas. For the first time, this legislative effort was also coordinated with a partner in the Senate: Sen. James E. Murray (D-MT), a “liberal stalwart” and chair of the Senate Labor and Public Welfare Committee, who submitted the Senate counterpart to his own committee. Although no action was taken on any of these bills in 1951, they carried forward automatically into the next year’s Congressional session, where they would ultimately see a debate and vote.⁷⁶

The first Congressional votes on the matter of air pollution research – and the first public opposition to a federal air pollution program by conservative legislators – came in summer 1952, in the last week of business of the 82nd Congress. The House Commerce Committee reported out Rep. Murphy’s bill, and final passage was intended to have been secured under unanimous consent agreements by which the House and Senate’s remaining legislative business were to be disposed. However, Congressional rules permitted any single legislator to object and thereby block any bill. Murphy’s bill permitted the appropriation of “such sums . . . as may be necessary” for five years of intensified research by PHS and the Bureau of Mines, and this was challenged by House Minority Leader Joseph W. Martin, Jr. (R-MA), who asked: “How much will it cost?” House Commerce Chair Rep. Arthur G. Klein (D-NY) promptly answered, “about \$75,000 or \$100,000 a year for five years.” Evidently satisfied, Rep. Martin then asked if the committee report recommending the bill was unanimous (it was) and let the matter rest, and the bill passed the House on unanimous consent. It then went to the Senate for a vote in similar fashion. Two Republican Senators, moderately conservative Sen. Andrew F. Schoepel (R-KS) and highly conservative Sen. Herman Welker (R-ID) raised their own concerns about the potential cost of the bill’s unlimited appropriation. Unlike Rep. Klein, however, Sen. Murray was unable to immediately provide a specific annual cost estimate, and Welker – who would become famous for his vigorous defense of Joseph McCarthy in 1954 –

1950 was conducted with some attention to their impact on her Senate campaign, but the timing was just as likely to have been due to the recent completion of the national smog conference referenced in Rep. Douglas’s introductory remarks. It is not clear that either party considered Douglas’s campaign to be “flagging” at the time. Again, answers on motive require the archives. For further information on the (in)famous Nixon-Douglas battle, GREG MITCHELL, *TRICKY DICK AND THE PINK LADY : RICHARD NIXON VS. HELEN GAHAGAN DOUGLAS-- SEXUAL POLITICS AND THE RED SCARE, 1950* (1998). Given the central role that accusations of communism played in the campaign, it is notable that Nixon’s campaign did not attempt to associate Douglas’s air pollution work with communism.

⁷⁶ The 1951 bills were H.J. Res 38, 82d Cong. (Murphy, D-NY) (Jan. 3, 1951) (\$500,000 appropriation), *ref’d House Commerce Committee* 97 Cong. Rec. 34 (Jan. 3, 1951); H.J. Res. 218, 82d Cong. (Murphy, D-NY) (Mar. 22, 1951) (unlimited appropriation and instruction to report), *ref’d House Commerce Committee* 97 Cong. Rec. 2,897-98 (Mar. 26, 1951); and S.J. Res. 110, 82d Cong. (Murray, D-MT) (Oct. 19, 1951) (copy of H.J. Res. 218), *ref’d Senate Labor and Public Welfare Committee* 97 Cong. Rec. 12,492 (Oct. 19, 1951), *with introductory remarks* 97 Cong. Rec. 12,495 (Oct. 19, 1951). On James E. Murray, see *Senator James Murray Dies in Butte*, GREAT FALLS TRIBUNE, Mar. 24, 1961, at 1.

objected to the bill on those grounds, killing it for the year. Welker, then, became the first conservative legislator in U.S. history to vote against federal air pollution legislation.⁷⁷

The end of 1952 marked the end of the Truman administration, and, as it turned out, of the Democratic majorities in Congress. The November 1952 election brought in moderate Republican Dwight D. Eisenhower and a Republican-controlled House and Senate for the 83rd Congress. PHS continued to investigate air pollution without a formal mandate, and Representatives continued to re-submit bills. But the legislative environment was now very different, with a new and much more fiscally conservative party now in leadership.⁷⁸ This newly empowered conservatism immediately expressed itself in a renewed interest in balancing the federal budget, and the PHS budget was not spared. This led to a 1953 debate over the PHS budget line for “engineering, sanitation, and industrial hygiene,” which the Republican-controlled House Appropriations committee had cut by about 25%, from about \$4,000,000 to a flat \$3,000,000, below even what the Eisenhower administration had requested. Representatives from California and Ohio pointed out that this was the water and air pollution research budget, which they cared a great deal about, and sought to increase it again. The vocal opposition to any increases was centralized in the midwestern industrial states represented by old guard conservatives – outspoken anti-communist and budget hawk Rep. Fred E. Busbey (R-IL) spoke against the amendment, and the entire discussion was preceded by what can only be described as a highly sarcastic speech from staunch conservative Rep. Clare Hoffman (R-MI). At the end of the debate, the fiscal conservatives won out, and the PHS pollution research budget remained cut along with everything else in 1953.⁷⁹

⁷⁷ The bill was Rep. Murphy’s H.J. Res. 218, submitted in 1951, reported favorably from the House Commerce Committee in House Report No. 2359 (Jun. 30, 1952). The colloquy with Rep. Martin is at 1952 Cong. Rec. 8940 (Jul. 2, 1952). Although Rep. Martin would later support federal water pollution control legislation and spending, and even voted to override Eisenhower’s cost-based veto of the water pollution bill in 1960, he was at the time a consistent fiscal conservative. See James Joseph Kenneally, *A Compassionate Conservative: A Political Biography of Joseph W. Martin, Jr., Speaker of the U.S. House of Representatives*, 283 (2003). For the Senate action on H.J. Res. 218, see Senate Report No. 2079 (Jul. 3, 1952), and 1952 Cong. Rec. 9314-15 (Jul. 4, 1952). Sen. Schoeppel was not a renowned conservative but supported Robert Taft against Dwight Eisenhower in the 1952 Republican presidential primary. Sen. Welker, on the other hand, although he served only one Senate term, made a name for himself as a vigorous anti-Communist and member of the farthest right wing of the Republican Party. *Ex-Senator Welker Dies At Age Of 51*, DAILY PRESS, Oct. 31, 1957, at 37.

⁷⁸ For fiscal review of PHS programs in 1953 and 1954, see *The Budget of the U.S. Government 1953*, 1185 (1952); *Department of Labor – Federal Security Agency Appropriations for 1954: Hearings before the House Appropriations Committee*, at 720 (Mar. 26, 1953); *Labor – Health, Education, and Welfare Appropriations for 1954: Hearings before the Senate Appropriations Committee*, at 1218-19 (May 26, 1953); *Departments of State, Justice, and Commerce Appropriations for 1954: Hearings before the Senate Appropriations Committee*, at 1330, 1336 (Apr. 23, 1953); *Departments of State, Justice, and Commerce Appropriations for 1954: Hearings before the House Appropriations Committee*, 281 (Mar. 18, 1953). Proposed legislation in 1953 included H.J. Res. 72, 82d Cong. (Ray, R-NY) (Jan. 3, 1953) (copy of H.J. Res. 218), *ref’d House Commerce Committee 1953 Cong. Rec.* 68 (Jan. 3, 1953); H.J. Res. 174, 82d Cong. (Poulson, R-CA) (Feb. 6, 1953) (same), *ref’d House Commerce Committee 1953 Cong. Rec.* 952 (Feb. 6, 1953); and H.R. 2720, 82d Cong. (Hinshaw, R-CA) (Feb. 6, 1953) (accelerated amortization for tax purposes on business costs for installation of pollution control equipment), *ref’d House Ways and Means Committee 1953 Cong. Rec.* 951 (Feb. 6, 1953).

⁷⁹ For the debate, see 99 Cong. Rec. 5493-95 (May 25, 1953). On Busbey’s politics, see *Edward Wilson, Busbey Fight in 3d Based on Americanism*, CHICAGO TRIBUNE, Mar. 3, 1946, at 26. On Hoffman, see *Michigan’s Clare Hoffman Dies at 92*, THE TERRE HAUTE TRIBUNE, Nov. 5, 1967, at 16.

One final bill failed to leave committee in 1953, and became central to events in 1954: a pro-business alternative from the chairman of California's Republican House delegation, Rep. Carl Hinshaw, which provided for accelerated amortization under the federal tax code for the costs of air pollution control devices installed by industry, creating a financial incentive to install them. This idea was taken up by California's moderate Republican Senator, Thomas Kuchel (pronounced "Keekel"), who became a strong advocate on the air pollution issue in the Senate in 1954. Rather than attempt to submit a standalone bill to a committee he did not control, Kuchel recruited Indiana Republican Sen. Homer Capehart to introduce an air pollution amendment into the pending federal housing act, which was then being handled by the Senate Banking and Finance Committee, which Capehart chaired. Kuchel's amendment included three major proposals: the accelerated tax amortization and associated unknown tax expense that had first been introduced by Rep. Hinshaw; plus \$5 million for ongoing research by PHS consistent with prior efforts to secure that funding; and finally \$50 million for government loans to support businesses installing pollution control equipment. Following a series of short hearings on the amendment (during which no dissent was invited or registered), the Senate committee reported out a bill that included the air pollution program and many other changes to the House bill, which was subsequently debated and passed with amendments by the Senate and returned to the House for conference. The Senate, in other words, had just unanimously passed a housing bill that included an expensive, but business-oriented, air pollution control program.⁸⁰ By mid-July, however, the conference had removed the air pollution program from the bill, because the House conferees (four Republicans and three Southern Democrats) flatly refused to incorporate it. With the air pollution program removed, the housing bill was taken up in the House, passed, and sent back to the Senate where it was also passed. In November, Sen. Kuchel could only lament that the House had blocked his air pollution program. By way of commentary he submitted a news report on a meeting of the National Association of Real Estate Boards (NAREB), active lobbyists on the housing bill) that had been interrupted by a terrible smog event, but had, notwithstanding its suffering, passed resolutions urging that all functions of the federal government that could be conducted by the states, should be conducted by the states. Thus, 1954, and the 83rd Congress, ended without an air pollution bill.⁸¹

⁸⁰ On the Housing Act amendment, see S. 3115 (Kuchel, R-CA) (Mar. 11, 1954), introduced with remarks and referred to Senate Finance Committee, 1954 Cong. Rec. 3060 (Mar. 11, 1954), and S. 2938 (Capehart R-IN & Kuchel, R-CA, Apr. 1, 1954), introduced 1954 Cong. Rec. 4312 (Apr. 1, 1954). Research is still needed on how Kuchel convinced Capehart to undertake this effort. Bailey states that the two Senators were "[f]rustrated at the prospect of air pollution control bills disappearing without trace in unsympathetic committees," but without citation. BAILEY, *supra* note 4 at 94. On the House bill prior to the Senate amendment, see 1954 Cong. Rec. 4430-91 (House debate and vote) (Apr. 2, 1954); 1954 Cong. Rec. 4576 (Apr. 5, 1954) (Senate referral to Committee on Banking and Currency). On the Senate's deliberations over the air pollution amendment, see Hearings before the House Banking and Currency Committee, *Housing Act of 1954 – Air Pollution Prevention Amendment* (Apr. 13-15, 1954). The Senate bill was reported in House Report No. 1472 (May 28, 1954) and debated and passed unanimously at 1954 Cong. Rec. 7609-25 (Jun. 3, 1954).

⁸¹ On the House debate on the Senate bill and conference, see 1954 Cong. Rec. 8456-72 (Jun. 17, 1954). On the removal of the air pollution program, see *Air Pollution Provisions Cut Out of Housing Bill*, THE LOS ANGELES TIMES, Jul. 16, 1954, at 14. On the conference bill, see 1954 Cong. Rec. 11071-110 (Jul. 20, 1954) (House vote). For Kuchel's commentary, see

The November 1954 midterm elections saw the return of Democratic majorities to the House and Senate, and Congressional power on air pollution shift back to the House Health and Safety Committee. Rather than work with the House, Sens. Kuchel and Capehart wrote a letter to President Eisenhower proposing a study committee to consider federal air pollution programs. The administration agreed and convened the Ad Hoc Interdepartmental Committee on Community Air Pollution with representatives from multiple interested agencies. The Committee's final report was titled "The Federal Role in the Community Air Pollution Problem," and as its title indicated it was formulated carefully to counter conservative objections to the federal government's entry into a new field. It defined its proposed program carefully to maintain supremacy of the states and recommended that federal support be limited to research in order to avoid impinging on state prerogatives - a cautious "middle way" approach. The Eisenhower administration separately indicated its support for such a program through two policy statements in early 1955. The 84th Congress, then, began with an unprecedented spate of air pollution bill submissions, led primarily by moderate Republicans.⁸²

1954 Cong. Rec. A6859 (Nov. 17, 1954). NAREB's position on the air pollution program has not been studied. Nor have the reasons for the conference committee refusing to consider the air pollution program from the Senate's bill.

⁸² The Kuchel-Capehart letter is quoted at Ripley, *supra* note 4 at 230. As a source, however, the Ripley chapter requires some explanation, as it is both extremely valuable and extremely problematic. On the one hand, it is the best extant explanation of the legislative process - and particularly the arguments within PHS and HEW - regarding the Clean Air Act of 1963, and it was written relatively soon after the event and appears to have been built on interviews with one or more persons within PHS, at least, and a close reading of the legislative materials and hearing transcripts developed in Congress. As such, it is an invaluable source. Its problem, however, is that it contains no references at all - no footnotes, no endnotes, no discussion of evidence. Thus, it is impossible to determine in any given case what evidence Ripley was relying on. Although his telling of legislative details can be corroborated (or not) through a review of the extensive legislative record, this is particularly problematic because he also often attributes motive to actions. There are many good reasons to distrust motive evidence, whether given on behalf of one's self or of others, and this is doubly the case where the sources cannot be examined independently. Because motive is an important in this analysis, Ripley's work is taken as suggestive, but cannot be taken as dispositive, and every effort has been made here to test Ripley's claims against the remainder of the record. The direct quotation in this citation resolves some of these concerns. However, the final departmental report states only that the committee was created at the "informal request from the Office of the President." AD HOC INTERDEPARTMENTAL COMMITTEE ON COMMUNITY AIR POLLUTION, THE FEDERAL ROLE IN THE COMMUNITY AIR POLLUTION PROBLEM (1955). For Eisenhower's public expressions of support, see Dwight D. Eisenhower ("DDE"), *Annual Message to Congress on the State of the Union*, 1955 Pub. Papers 7 (Jan. 6, 1955); DDE, *Special Message to the Congress Recommending a Health Program*, 1955 Pub. Papers 216 (Jan. 31, 1955). The 1955 air pollution bills were H.R. 835, 84th Cong. (Ray, R-NY) (Jan. 5, 1955), H.R. 2129, 84th Cong. (Frelinghuysen, R-NJ) (Jan. 13, 1955); H.R. 2888, 84th Cong. (Williams, D-NJ) (Jan. 24, 1955); H. Res. 116, 84th Cong. (Dollinger, D-NY) (Jan. 26, 1955); H.R. 3547, 84th Cong. (Byrnes, R-WI) (Feb. 3, 1955); H.R. 3548, 84th Cong. (Abbitt, D-VA) (Feb. 3, 1955); H.R. 3549, 84th Cong. (Bentley, R-MI) (Feb. 3, 1955); H.R. 3551, 84th Cong. (Hinshaw, R-CA, Feb. 3, 1955); H.R. 3552, 84th Cong. (Jackson, R-CA) (Feb. 3, 1955); H.R. 3553, 84th Cong. (Lipscomb, R-CA) (Feb. 3, 1955); H.R. 3555, 84th Cong. (Ray, R-NY) (Feb. 3, 1955); S. 917, 84th Cong. (multiple sponsors) (Feb. 4, 1955); S. 928, 84th Cong. (multiple sponsors) (Feb. 4, 1955), *rep'd* Senate Rep. 389 (May 27, 1950); H.R. 3680, 84th Cong. (McDonough, R-CA) (Feb. 7, 1955); H.R. 3901, 84th Cong. (Hiestand, R-CA) (Feb. 10, 1955); H.R. 3906, 84th Cong. (Laird, R-WI) (Feb. 10, 1955); H.R. 4313, 84th Cong. (Miller, R-NY) (Feb. 23, 1955); H.R. 4741, 84th Cong. (Nelson, R-ME) (Mar. 8, 1955); S. 1565, 84th Cong. (Capehart, R-IN) (Mar. 28, 1955); H.J. Res. 259, 84th Cong. (Hess, R-OH) (Mar. 23, 1955); S. 2126, 84th Cong., *rep'd directly in* Rep. No. 404 (Jun. 1, 1955); H.R. 6597, 84th Cong. (Hiestand, R-CA) (Jun. 1, 1955); H.R. 6699, 84th Cong. (Roosevelt, D-CA) (Jun. 7, 1955). Although this was a diverse group of legislators, it is notable for its predominant lack of Southern Democrats and conservative Republicans.

The bill that would get legislative attention was submitted by Sens. Martin (R-PA), Capewhart (R-IN), Knowland (R-CA), Kuchel (R-CA), Potter (R-MI), and Wiley (R-WI) in February 1954. HEW and PHS supported it and Senator Kuchel introduced it, reassuring everyone that “it is not the thought that Congress has anything to do with control of air pollution through the proposed legislation or through any contemplated Federal legislation. That problem remains where it ought to remain - in the States of the Union, and in the cities and the counties of our country.” The bill passed by unanimous consent.⁸³ The same point was reiterated in the House, and once again in the Senate while approving several house amendments: the bill would not create a federal air pollution control program.⁸⁴ Rather, the bill proposed a research program, eventually set at \$5 million per year for five years. It passed and was called, quite misleadingly, the Air Pollution Control Act of 1955.⁸⁵ PHS’s role had been decided: it would support the states and coordinate research, with a five year authorization to review spending, consistent with conservative principles of federalism and fiscal responsibility. It would not enter the business of technology development or, especially, enforcement. Tax relief programs for business were not included.

The years between 1955 and 1958 saw the House Health and Safety Subcommittee begin to take on traffic safety matters, and it was in this context that Rep. Paul Schenck (R-OH) first began to agitate for the Surgeon General to set emissions standards for automobiles – an effort that failed and was converted into another research bill in 1960. Under the 1955 Act, researchers associated with or funded by the PHS air pollution program would produce almost a thousand research publications on a vast range of fundamental problems in air pollution control, many of which would be absolutely essential to justifying regulatory limits in the future.⁸⁶ But in the meantime, many U.S. cities remained choked by smog. The 1955 Act’s limited-federal, research-oriented approach was the new standard for federal involvement, but it did not force any action.

C. 1958-1960: the Flemming Proposal

Arthur S. Flemming deserves credit as the first person to actively promote letting the federal government fight air pollution, in addition to researching it. As a member of Eisenhower’s cabinet, he might have been an unlikely advocate. But Flemming was, above all else, interested in the discipline of good government – he was the former director of American University’s School of Public Affairs, had served on the Hoover Commission on government organization, and had run the Office of Defense Mobilization from 1952 until Eisenhower needed a new HEW Secretary and tapped him for the role in August 1958. Among his early duties was to assist with a national smog conference that had already been scheduled. It is not clear exactly how the idea came to him – at the conference he said only that the role of the federal government was foremost on his mind. But at a

⁸³ For Senate debate and vote, *see* 1955 Cong. Rec. 7248-50 (May 31, 1955).

⁸⁴ For House debate and vote, *see* 1955 Cong. Rec. 9923-25 (Jul 5, 1955). For Senate consideration of the house amendments, *see* 1955 Cong. Rec. 9984-85 (Jul. 6, 1955).

⁸⁵ Air Pollution Control Act of 1955, Pub. L. 84-159, 69 Stat. 322 (Jul. 14, 1955).

⁸⁶ ANNA GROSSMAN-COOPER, AIR POLLUTION PUBLICATIONS: A SELECTED BIBLIOGRAPHY 1955-1963 (1964).

press conference a few days later, it was reported that “Flemming said that he personally favored strengthening the Air Pollution Act by authorizing government to hold hearings and make findings and recommendations, particularly on interstate pollution problems.”⁸⁷

What this meant requires explanation. The idea was to translate a similar authority granted to PHS under the existing version of the Federal Water Pollution Control Act (FWPCA) – specifically FWPCA’s most recent revisions in 1956 – to the air pollution context. FWPCA 1956 had authorized PHS to conduct “conferences” whenever PHS determined that water pollution was threatening public health, and that the states involved were not be doing enough to solve the problem. It also empowered PHS, for the first time, to use the conference findings as the basis for water pollution abatement actions in federal court if the situation did not improve. Flemming had his staff prepare draft legislation along these lines for air pollution, and the resulting proposal’s thresholds for federal jurisdiction, its administrative processes, and the use of its findings all began as borrowings from FWPCA, condensed and modified but nonetheless recognizable. The critical difference was that Flemming’s air pollution proposal only authorized hearings as an information-generating endeavor to create nonbinding recommendations –it did not include an analogous abatement or enforcement mechanism.⁸⁸ Throughout the rest of this Article, this idea – the power to force a hearing on air pollution problems but lacking independent authority to abate the pollution after the hearing, is referred to as “the Flemming proposal.”

Flemming had his idea translated into legislation in 1959, and request and secured approval from the Eisenhower administration to push the idea forward after that. In January 1960, President Eisenhower’s Annual Budget Message indicated that HEW was writing “legislative recommendations to . . . authorize greater Federal leadership in combating air pollution.” In February, HEW staff transmitted a proposed bill to Congress, with a request to consider it. Rep. Roberts, chair of the House Health and Safety Subcommittee, submitted the bill – the first to contain language that would eventually be incorporated into the Clean Air Act of 1963. Sen. Kuchel submitted it to the Senate, whence it also eventually made its way to Roberts’ committee.⁸⁹

⁸⁷ On Arthur S. Flemming, see Interview by Niel M. Johnson with Arthur S. Flemming, Member, U.S. Civil Svc. Comm’n, 1939-48; Asst. to Dir. of Defense Mobilization, 1951-53, in Washington, D.C. (June 19, 1989), available online [here](#); and Eric Pace, *Arthur S. Flemming, 91, Dies; Served in Eisenhower Cabinet*, THE NEW YORK TIMES, Sep. 9, 1996. On the origins of the air pollution conference, see *Congressmen Support Anti-Smog Auto Drive*, THE LOS ANGELES TIMES, Jan. 10, 1958, at 28; *Smog Foes Assured of Federal Aid*, INDEPENDENT, Jan. 10, 1958, at 18; *Dorn Pushes Fight on Smog*, INDEPENDENT, Jan. 22, 1958, at 5; *Need More Money, Effort To Clean Air*, ST. ALBANS DAILY MESSENGER, Nov. 21, 1958, at 7. For Flemming’s talk at the conference, see PHS, PROCEEDINGS OF THE NATIONAL CONFERENCE ON AIR POLLUTION at 482–86 (1958). For Flemming’s public statement of his proposal, see *Air Pollution Study Pushed; Research Team To Be Set Up*, THE BERKSHIRE EAGLE, Dec. 3, 1958, at 18.

⁸⁸ On the relationship between FWPCA, H.R. 10696, and Flemming’s proposal, compare FWPCA, Pub. L. 945, 62 Stat. Ch. 758 § 2(d) (Jun. 30, 1948) and FWPCA Amendments, Pub. L. 660, 70 Stat. Ch. 518 § 8 (1956), with H.R. 10696, § 2 (1960). [redline comparisons on file with author].

⁸⁹ On the administration’s statement: DDE, [Annual Budget Message to the Congress: Fiscal Year 1961](#), 1960 Pub. Papers 94 (Jan. 18, 1960). On the 1960 bills and legislative actions: H.R. 10696, 86th Cong. (Roberts, D-AL) (Feb. 25,

It is likely that Flemming developed his proposal over the objections of some within PHS's Air Pollution Division, who expressed concern that seeking new and potentially controversial oversight authority would draw Congressional scrutiny and threaten PHS's research budget. It certainly was the case that the conference authority was already controversial, and would expand the federal role beyond the relatively technical, sedate, and (arguably) apolitical project of research development and coordination, into the highly charged and very political project of conducting public inquiries into state progress on air pollution. As such, it was controversial, and hauling state officers before a federal fact-finding tribunal at the discretion of the Surgeon General was likely to generate states' rights opposition.⁹⁰

In any event, in 1960 the Flemming bills died in Roberts' committee. The key question was: why? Roberts was a Southern Democrat, signatory of the Southern Manifesto, and firmly committed to states' rights as a means to protect segregation in the South. But he was also sincerely interested in fighting air pollution. Over the next few years Roberts would resolve this tension by repeatedly expressing his commitment to limited federal programming, but also seeking to hearing to discuss proposals to expand federal activities in the area, until he was eventually able to be convinced. In 1960, then, Rep. Roberts intended to hold a hearing on the Flemming proposal. His House colleague from Birmingham had lobbied Roberts to hold a federal hearing on air pollution in the city in summer 1960, and Roberts had agreed, but under House rules was not allowed to do so without approval from the chair of the full House Commerce Committee. Roberts received that approval only in November 1960, after the legislative session had already ended. Then, after the Birmingham hearing was scheduled and planned, it had to be postponed after Roberts underwent minor surgery and was advised by his doctor not to travel. Thus, the Flemming bill died not because Roberts or his committee actively opposed it, but because Roberts was unable to incorporate it into a hearing that, for a variety of reasons, he intended to hold prior to reporting any air pollution legislation out of his committee.⁹¹ Of course, had the hearing happened, Roberts may have found another reason to delay the bill – as the question of expanding federal power was still of paramount concern to in Congress.

1960); S. 3108, 86th Cong. (Kuchel, R-CA) (Feb. 26, 1960), reported in the Senate by S. Rep. No. 86-1723 (Jun. 24, 1960), passed in Senate at 106 Cong. Rec. 14,689-92 (Jun. 28, 1960), referred to House Commerce Committee at 106 Cong. Rec. 15,038 (Jun. 29, 1960). On the date transmittal from HEW to Congress, *see* S. Rep. No. 86-1723 at 4.

⁹⁰ On objections to Flemming's proposal within PHS, Ripley is the only source, subject to the usual caveats: Ripley, *supra* note 4 at 232–33. If it happened, the most likely source of objection would have been Division of Air Pollution chief Vernon Mackenzie, who, as discussed in the following section, opposed efforts to give PHS enforcement authority, but this is not clear in the record. The political difficulties presented by the PHS's conference authority under FWPCA was the topic of discussion in the later hearings held on later bills. *See, e.g., Air Pollution: Hearing on multiple bills before the House Health and Safety Subcommittee*, at 116-17 (Mar. 18, 1963) (Statement of Thomas R. Glenn, Jr., engineer, Interstate Sanitation Commission); and at 172-73 (Mar. 18, 1963) (Statement of Daniel W. Cannon, Natural Resources Committee, National Association of Manufacturers).

⁹¹ On the attempted Birmingham hearing: James Free, *Alabama Should Know . . .*, THE BIRMINGHAM NEWS, May 28, 1960, at 1; *Birmingham Put in Worst Air Polluted Category by New Survey*, THE BIRMINGHAM NEWS, Jul. 27, 1960, at 30; *Birmingham Hearing on Air Pollution*, THE BIRMINGHAM NEWS, Nov. 26, 1960, at 1; James Free, *Birmingham Air Pollution Hearing Is Set*, THE BIRMINGHAM NEWS, Dec. 2, 1960, at 1; *Air Pollution Probe Put Off*, THE BIRMINGHAM NEWS, Dec. 6, 1960, at 1.

And so, 1960 ended only with a small extension of the 1955 Act's research program. But then the world changed.

D. 1961: the AMA Proposals

In November 1960, Democrat John F. Kennedy narrowly defeated Republican Richard M. Nixon to win the presidential election. Although the balance of power in Congress remained largely as it had been, with Kennedy in power the federal executive leadership changed completely. Long-time Kennedy ally Abraham Ribicoff was offered his choice of cabinet positions and took HEW, replacing Flemming. Ivan Nestingen, who had run Kennedy's Wisconsin election campaign, was recruited to lead PHS. Luther Terry was appointed Surgeon General. These leaders had very different ideas about the role of the federal government than did the Eisenhower administration.⁹²

As the 1961 legislative session opened, the 87th Congress was required to reset the legislative clock. Bills that had died in committee the previous year had to be resubmitted if they were to get another chance. This happened with the Flemming proposal, which was resubmitted by interested legislators from California in January 1961. Rep. Roberts, however, introduced only an extension of the 1955 Act that did include the Flemming proposal. As usual, all of these were referred to Roberts' Health and Safety Subcommittee. Thus, at the beginning of the 87th Congress, the Flemming proposal remained the most advanced thinking on federal air pollution authority and was again awaiting some action in the House. But time had brought change, and change brought new ideas to bear.⁹³

1. The Kennedy Administration Weighs In (February, June 1961)

It is impossible to say how air pollution legislation would have developed, had Richard Nixon won the 1960 presidential election and carried on, in some fashion, Eisenhower's moderate Republican government. Instead, John F. Kennedy entered with a decade-long backlog of reform-minded proposals for federal action to consider. Kennedy had promised a domestic program for the "new frontier" of the 1960s, but as he entered office it was still largely unclear what that agenda would

⁹² On Ribicoff's appointment: Janet Hook & Richard T. Cooper, *Abraham A. Ribicoff, 87; Senator Known for Role at '68 Convention*, LOS ANGELES TIMES, Feb. 23, 1998. On Nestingen's: Interview by Niel M. Charles T. Morrissey with Ivan Nestingen, Undersecretary of Health, Education, and Welfare from 1961 to 1965, in Washington, D.C., at 21 (Mar. 3, 1966), available online [here](#). On Terry's: Eric Pace, *Dr. Luther L. Terry, 73, Is Dead; Warned Public of Cigarette Peril*, THE NEW YORK TIMES, Mar. 31, 1985.

⁹³ The House bills that were verbatim copies of H.R. 10696, 86th Cong. (1960), were H.R. 2948, 87th Cong. (Shelley, D-CA) (Jan. 18, 1961); H.R. 3577, 87th Cong. (Roosevelt, D-CA) (Jan. 30, 1961), and H.R. 9352, 87th Cong. (Corman, D-CA) (Sep. 21, 1961). The Senate bill was S. 455, 87th Cong. (Kuchel, R-CA) (Jan. 16, 1961). Rep. Roberts' bill was H.R. 3083, 87th Cong. (Jan. 23, 1961). It is not clear what Roberts' motivation for his more limited submission was, and whether it can be taken as an indication that he opposed the federal authority expansion in the other bills.

look like. With respect to air pollution, the answer was that the Kennedy administration began without any clear goals but set an agenda consistent with increased federal activity in the future.⁹⁴

John F. Kennedy is not remembered today as a strong proponent of environmental causes. His Interior Secretary, Stewart Udall, struggled to interest him in conservation issues, although today it is recognized that Kennedy's secret health problems may have prevented him from conforming to Udall's ideals. During his presidential campaign, Kennedy had relied on an advisory committee to develop his natural resources policies and appears to have been largely content to defer to that group on what to highlight. However, he was better versed in pollution issues than he is typically given credit for. During his House and Senate career, Kennedy had connected water pollution control with economic wellbeing, and he had become a vocal supporter of the Federal Water Pollution Control Act. On the campaign trail in 1960, he had given several speeches on the topic, and criticized Eisenhower's 1960 veto of FWPCA amendments. What he did not have was a legislative agenda for air pollution.⁹⁵

On January 23, 1961 – three days after his inauguration – Kennedy announced that he would address Congress in an immediate State of the Union address, and follow that with a series of detailed domestic legislative proposals spelled out in a series of “special messages to Congress.”⁹⁶ Although seven to ten were initially planned, Kennedy ultimately sent twenty-seven such messages between February and September 1961 alone. They included major new proposals for federal action, including the Peace Corps and what would later become Medicaid. They also included statements on public health and natural resources, the two policy areas where air pollution matters would naturally have been raised, but the health message did not mention air pollution at all, and the natural resources program, a reworking of the report of Kennedy's campaign advisory committee, included air pollution only as an afterthought, offering that a new PHS unit proposed for developing water pollution control measures also “should provide new leadership, research and financial and technical assistance for the control of air pollution,” and called very generally for “an effective Federal air pollution control program.” In other words, while Kennedy and his policy advisors dreamed of a

⁹⁴ On Kennedy's New Frontier in his campaign and presidency: IRVING BERNSTEIN, *PROMISES KEPT: JOHN F. KENNEDY'S NEW FRONTIER* (1991).

⁹⁵ On Udall, Kennedy, and the campaign committee on conservation: SMITH, *supra* note 3 at 149–71. Kennedy's work on water pollution is available at the Kennedy Archives: JFK, *ECONOMIC PROBLEMS OF NEW ENGLAND* (1953), <https://www.jfklibrary.org/asset-viewer/archives/JFKSEN/0893/JFKSEN-0893-013> (last visited Jul. 16, 2020); JFK, *STATEMENT OF SEN. KENNEDY BEFORE THE SELECT COMMITTEE ON WATER RESOURCES* (1959), <https://www.jfklibrary.org/asset-viewer/archives/JFKCAMP1960/1031/JFKCAMP1960-1031-017> (last visited Jul. 16, 2020); JFK, *REMARKS AT WESTERN CONFERENCE* (1960), <https://www.jfklibrary.org/asset-viewer/archives/JFKCAMP1960/0995/JFKCAMP1960-0995-002> (last visited Jul. 16, 2020); JFK, *REMARKS AT FON DU LAC, WISCONSIN* (1960), <https://www.jfklibrary.org/asset-viewer/archives/JFKSEN/0906/JFKSEN-0906-023> (last visited Jul. 16, 2020); JFK, *PRESS RELEASE: WATER POLLUTION* (1960), <https://www.jfklibrary.org/asset-viewer/archives/JFKCAMP1960/1048/JFKCAMP1960-1048-009> (last visited Jul. 16, 2020).

⁹⁶ On the plans for the special messages, see *Kennedy Calls for Disarmament Plans*, *THE BONHAM DAILY FAVORITE*, Jan. 24, 1961, at 1; *Kennedy to Seek Program Action*, *THE SPOKESMAN-REVIEW*, Feb. 1, 1961, at 14. For a complete list of the special messages to Congress in the first year, see *Public Paper of the President for 1960*.

much more robust federal role in many aspects of U.S. society, those dreams did not, in 1961, include a federal solution to urban air pollution.⁹⁷

Again, however, the administration clearly did understand pollution to be a problem. In early 1960 the water pollution program had been more fully developed, had been the subject of campaign speeches, and had seen amendments brought farther along legislatively than had the air pollution program. Thus, during the summer of 1961, both Kennedy and Congress focused on the water program first. In June 1961, Congress passed FWPCA amendments that had been under discussion for several years.⁹⁸ As Kennedy noted in his remarks upon signing the bill: “I think this affords a more comprehensive and precise definition of the Federal government’s role in controlling . . . pollution”⁹⁹ With a newly updated water pollution statute now available as a model, new opportunities for innovation in air pollution presented themselves.

2. Hugh Miels’ Contributions (February to November 1961)

Unlike the Kennedy administration, there was one group with a very clear idea of what it wanted to see in new air pollution legislation in 1961: the American Municipal Association. As explained in Part I, the AMA was one of several influential inter-municipal organizations that had been developing in the postwar U.S. as the “urban lobby,” and that promoted a greater federal role in solving the common problems of large cities, in the face of a great deal of neglect and even opposition by many state governments. While their long-term goal was a new federal department devoted to urban affairs, these groups shared common interest in resolving air pollution, which in its worst forms plagued large cities most of all.

Hugh Miels, Jr. was the AMA’s legislative director and is the one person who could (and did) with some justification claim to be the primary author of the Clean Air Act of 1963. According to him, his work on the topic arose out of his work for the AMA on urban issues generally, and he wrote the first draft of an air pollution bill in early 1961 in consultation (and disagreement) with Vernon Mackenzie, the director of the PHS’s Division of Air Pollution. The primary conflict between Miels and MacKenzie was on the question of whether PHS should have any sort of independent power to fight air pollution – with Miels pushing the idea, and Mackenzie, “conservative” according to Miels, opposing it. Thus, per Miels, he developed two separate legislative proposals on air pollution, one that added an independent PHS abatement authority, and one that did not. “The first copy that was written did not have enforcement in it, but we wanted enforcement. We then

⁹⁷ JFK, Special Message to Congress on Natural Resources, 1961 Pub. Papers 117 (Feb. 23, 1961); JFK, Special Message to Congress and Health and Hospital Care, 1961 Pub. Papers 27 (Feb. 99, 1961).

⁹⁸ FWPCA Amendments, Pub. L. 87-88, 75 Stat. 204 (Jul. 20, 1961).

⁹⁹ JFK, Remarks Upon Signing the Federal Water Pollution Control Act Amendments, 1961 Pub. Papers 294 (Jul. 20, 1961).

developed an enforcement section which paralleled water pollution control enforcement,” and attempted to get Congressional sponsors to introduce them both so that they could be considered.¹⁰⁰

In Kennedy, the AMA had a friend, and they had good reason to expect his administration’s support. Kennedy had spoken repeatedly to AMA members during his 1960 presidential campaign and had developed a strong position on the problems of conservative federalism as early as 1957. In a speech to the U.S. Conference of Mayors titled “Our American Cities and their Second-Class Citizens,” he had lamented what he saw as the anti-urban prejudice in U.S. politics, and had used air pollution as one of his examples: “A political leader from Scranton or Providence or Miami is deemed incapable of understanding the problems of the farmer or miner, although spokesmen from rural and mining areas have no hesitation whatsoever in revamping our plans for urban development or smog control.” (emphasis in original) He excoriated the state and federal governments’ failures to address urban concerns, and placed the blame squarely: “the hard facts of the matter are that the apportionment of seats in our Federal and state legislatures has been deliberately rigged and juggled in such a manner as to deny to the cities and their voters their full and equal voice in those legislative bodies.” He argued that the only path forward was increased federal authority in urban matters: “As long as democracy is distorted in this fashion, we can rightfully expect our cities to seek Federal action on the urban problems ignored by [their] unsympathetic and unrepresentative state legislatures.” He developed these themes further in two additional speeches in 1957 and 1959, and consistently discussed pollution as an important element of the urban situation. There was every reason to expect that the Kennedy administration would be sympathetic to proposals to use the federal government to address air pollution in cities. This meant lobbying.¹⁰¹

¹⁰⁰ On Miels’ role: Interview by William H. McHugh with Hugh Miels, Assistant Adm’r, Cong. Liaison, U.S. Dept. of Hous. and Home Fin. Agency, 1961-63, in Washington, D.C., at 51-52 (Oct. 21, 1968), JFK Archives Digital Identifier # JFKOH-HJM-01 (“Miels Interview”), available online [here](#). (“I was very much involved and I wrote the first copy of the Clear Air Act. . . . I probably had more to do with environmental legislation in the United States than anybody else in the country with the exception of my [AMA] associate Ron Linton and a few guys on the Hill and Senator Muskie himself.”). Although Mackenzie for his part did not credit Miels (limiting his brief discussion to Wilbur J. Cohen, the coordinator of Kennedy’s legislative office), he was not asked directly and all further developments are consistent with Miels’ authorship as he described it. *See* Interview by William H. McHugh with Vernon MacKenzie, Chief of the Pub. Health Serv. Div. of Air Pollution, in Washington, D.C. (Apr. 19, 1967), JFK Archives Digital Identifier # JFKOH-VGM-01-TR (“Mackenzie Interview”), available online [here](#). Mackenzie, however, did note the importance of the Kennedy administration’s overall project of expanding the federal role in domestic problems: “The new Administration came in with a broader and more liberal viewpoint with respect to the participation of the federal government in social problems.” Mackenzie Interview at 2.

¹⁰¹ Kennedy’s speeches to the urban lobby are available through the Kennedy archives: JFK, OUR AMERICAN CITIES AND THEIR SECOND-CLASS CITIZENS (1957), <https://www.jfklibrary.org/asset-viewer/archives/JFKSEN/0898/JFKSEN-0898-006> (last visited Jul. 16, 2020); JFK, REMARKS TO THE FLORIDA LEAGUE OF MUNICIPALITIES (1957), <https://www.jfklibrary.org/asset-viewer/archives/JFKSEN/0898/JFKSEN-0898-032> (last visited Jul. 16, 2020); JFK, REMARKS TO THE LEAGUE OF MUNICIPALITIES, OCEAN CITY, MARYLAND (1959), <https://www.jfklibrary.org/asset-viewer/archives/JFKSEN/0903/JFKSEN-0903-013> (last visited Jul. 16, 2020).

a. The “League” Bill (February 1961)

Hugh Miels submitted his first bill to Ivan Nestingen, the new PHS head, in February 1961, where it was received by the office of Wilbur J. Cohen, HEW Assistant Secretary in charge of HEW’s legislative division, and likely reviewed by Dean W. Coston, who was the HEW legislative office expert on water and air pollution. The bill evidently received a favorable response.¹⁰²

Miels’ draft bill would only be submitted into the legislative record in November 1961, by the Alabama League of Municipalities, during the hearing in Birmingham held by Rep. Roberts, with no credit to Miels, and so is called here the “League” bill, or the “weak” AMA bill because it did not include strong enforcement provisions.¹⁰³ A review of the document reveals that Miels had provided an essential service: he had consolidated a number of ideas about federal authority over air pollution into a single document. A textual analysis, again, however, reveals that these ideas were not new – they were, rather, a skilled combination of many pre-existing ideas, translated and modified to make sense in the context of air pollution.

To start with, the “weak” AMA bill copied a policy that had first appeared as Eisenhower Executive Order 10779 encouraging federal facilities managers to take steps to reduce their pollution; copied declarations of policy from the 1955 Act; and incorporated the Flemming hearing authority proposal that had been floating around since Flemming first had it drafted. Miels’ unique contribution was to import many additional provisions from the Federal Water Pollution Control Act into the air pollution context. Specifically, the “League” bill borrowed from FWPCA: congressional instruction for federal encouragement of state and local cooperation on air pollution issues; congressional authorization for interstate compacts and joint agencies to regulate air pollution; congressional authorization for PHS to coordinate research, investigations, training, and surveys; congressional authorization for PHS to create regulations; unlimited appropriations to carry out the bill’s purposes; and many FWPCA definitions.¹⁰⁴

The bill appears to have framed the debate around federal air pollution control throughout 1961. In particular, it (and Miels’ advocacy on enforcement) continued to center the question of whether

¹⁰² Again, much of this comes from Ripley, but appears to be reporting on written correspondence that seems credible. See Ripley, *supra* note 4 at 239. On Coston’s role in the legislative division: Interview by William W. Moss with Wilbur J. Cohen, Assistant Sect. of Health, Education, and Welfare (1961-1965), in Ann Arbor, Michigan, at 89 (July 20, 1972), JFK Archives Digital Identifier # JFKOH-WJC-03 (“Cohen Interview”), available online [here](#). On the favorable response: Ripley at 239 (“In replying to [Miels’] letter [to Nestingen] Wilbur J. Cohen, the assistant secretary of HEW for legislation, indicated general agreement with the principles stated by Miels.”).

¹⁰³ The bill language does not appear in the record until November 1961, when it was introduced by Ed Reid of the Alabama League of Municipalities as part of the Health and Safety Subcommittee in Birmingham. Birmingham Hearing, *infra* n. __, at 70-75. The Alabama League was one of the AMA’s member organizations, and it is possible that Miels and Reid coordinated to transmit the bill language to Congress, and specifically to Rep. Roberts, with Reid acting as a local intermediary via the hearing that Huddleston and Roberts had arranged.

¹⁰⁴ Compare “League” bill Declaration of Policy and §§ 3, 4, 9, 10, & 11 with EO 10779, 1959 Extension Act § 2, H.R. 747, and FWPCA 1961 §§ 2, 3, 4, 8, and 9. [redline comparisons on file with author]

PHS should have the power to do something directly about the air pollution problem, beyond providing national research support and technical advising to the states. As described below, much of Miels' language was retained in later bills and had an enormous influence on both the structure and substance of the final law in 1963. But at this stage it did not contain the item that Miels wanted most of all: a federal abatement or enforcement authority equivalent to that in the federal water pollution act. Miels needed a Congressman willing to support the notion.

b. The Halpern Bill (September 1961)

In September 1961, Rep. Seymore Halpern (R-NY) introduced a bill that proposed two major expansions to federal authority over air pollution. There is reason to believe that the Halpern bill is Miels' second legislative proposal, i.e., the "strong" AMA bill: first, Miels reported that he wrote two bills, only one of which contained enforcement mechanisms; second, the Halpern bill contained aggressive and expansive federal enforcement authority; third, that authority was based on FWPCA in the same way that the earlier AMA bill was; and fourth, the bill contained no overlap at all with the prior AMA-sponsored proposals. Thus, it appears probable that this bill was also Miels' work, that Miels reached out to Halpern in his efforts to recruit legislators to propose it, and that other legislators, including Rep. Roberts and Sen. Kuchel, had all likely refused.

The Halpern bill's centerpiece was a procedure for the Surgeon General to abate air pollution. The language borrowed extensively from FWPCA, and specifically from the 1961 FWPCA amendments that had just become law two months earlier. The new administrative process was to be called a "conference." If requested by any Governor, state air pollution control agency, or municipality (with the concurrence of the state's governor), or if the Surgeon General had "reason to believe that air pollution [from one state] is endangering the health or welfare of persons in [another]," the Surgeon General was to convene a conference of the upwind and downwind states' pollution control authorities to develop findings on the occurrence of pollution, the "adequacy of measures taken toward abatement of the pollution," and the "nature of delays, if any, being encountered in abating the pollution." At any time thereafter, if the Surgeon General "believe[d] . . . that effective progress toward abatement of such pollution is not being made and that the health or welfare of any person is being endangered," he could make recommendations for "necessary remedial action," and, if satisfactory progress did not occur within six months, the HEW Secretary was to call a "public hearing," with a hearing board made of state and federal government representatives. "If the hearing board finds such pollution is occurring and effective progress toward abatement is not being made it shall make recommendations to [the HEW Secretary] the measures, if any, which it finds to be reasonable and equitable to secure abatement of such pollution." HEW was then authorized to order abatement in accordance with the findings. The abatement order would become final sixty

days later and was appealable only to the federal circuit courts. The law was clear that this process “displac[ed]” state, interstate, and local abatement authority under the specified circumstances.¹⁰⁵

As discussed below, this language did not gain traction in 1961 or 1962 but was recruited into legislation introduced in 1963 that others took credit for, and survived to become the most important element of the 1963 Clean Air Act.

3. A Hearing in Birmingham (November 1961)

As the AMA’s bills were circulating, the business of the House Health and Safety Subcommittee was to review legislation that had been referred to it. For most of 1961, that meant only the 1955 Act extension and the Flemming proposal. In September 1961, the Senate Public Works Committee reported favorably on the Senate version of these programs, and the Senate passed it on a voice vote. Sen. Kuchel reminded his colleagues that they had passed an identical bill the year before, and assured his conservative brethren that there was “nothing in this bill which would transgress on the jurisdiction, rights, and powers of States and other non-Federal agencies of government.”¹⁰⁶

In receipt of the bill from the Senate, the House Health and Safety Subcommittee did not refer the bill for a vote in the House before the end of the legislative session. Rather, Rep. Roberts finally conducted the air pollution hearing in Birmingham that he had been planning for the better part of a year and a half. As the proceedings began, the business was primarily the extension of the research program, and the question of limited federal authority to conduct limited hearings. Roberts’ opening statement at the Birmingham hearing took a characteristic, conservative stand on federal power in the field: “It is generally agreed I think, that the actual control of air pollution is a local responsibility. We could not set up and enforce an abatement program at long range from Washington.” The questions he posed to frame the discussion came from a fiscally and politically conservative perspective: a federal research program “costs money. With the great demands on the Federal Government for tax dollars, is [the existing 1955 research] program worthwhile? Should the program be continued? Should it be expanded?” But he then added, without further explanation: “Should the Surgeon General be given additional authority?” When he mentioned the pending legislation before the committee, he highlighted his own bill as an extension-only bill, and credited the extension proposal to the Senate (S. 455), without mentioning that S. 455 was a copy of his own bill. He thereby distanced himself personally from the Flemming proposal, while also providing it a public view.¹⁰⁷

¹⁰⁵ H.R. 9347, 87th Cong. (Halpern, R-NY) (Sep. 21, 1961), § 3.

¹⁰⁶ The Senate bill was S. 455, 87th Cong. (Jan. 17, 1961) reported in Senate Public Works Committee Report No. 1083 (Sept. 16, 1961), debated and passed in Senate 107 Cong. Rec. 20417-18 (Sept. 20, 1961).

¹⁰⁷ *Air Pollution: Additional Hearing before the Health and Safety Subcommittee*, 32-33 (Nov. 27, 1961) (“Birmingham Hearing”) (opening statement of Chairman Kenneth A. Roberts).

The Birmingham hearing, however, turned out to be a small affair. The speakers were largely local and friendly. The federal testimony reported on existing programs but was vague on future plans and silent on the details of new legislation. The hearing did not draw out any opposition. It was not, in other words, the main show. It did, however, relieve Roberts of his prior commitment to bring his subcommittee to Birmingham, and set the stage for further discussion in Washington.¹⁰⁸

E. 1962: Washington Happens

1962 was supposed to be the year that Congress passed a major new air pollution bill. The legislative session did not require resubmission of pending bills, and S. 455, incorporating the Flemming proposal, had already passed the Senate. The Kennedy Administration wanted it to become law and was now also supportive of many other elements of the “weak” AMA proposal. What remained was for staff to develop a consensus draft that incorporated the agreeable elements from these sources into a single bill, and for the House to hold hearings and pass it.

1. The Administration Position (February 1962)

The progress that had been made on thinking about environmental health within the Kennedy administration over the last year was clear in Kennedy’s second annual health policy statement, issued on February 27, 1962, which contained an entire section on “a healthy environment.” Four months before *The New Yorker* began serializing Rachel Carson’s *Silent Spring*, Kennedy argued: “There is an increasing gap in our knowledge of the impact upon our health of the many new chemical compounds and physical and biological factors introduced daily into our environment. Every year 400 to 500 new chemicals come into use. Many of them will improve the public health. Others, regardless of every safeguard, present potential hazards.”¹⁰⁹ To remedy this, Kennedy endorsed an air pollution bill containing the Flemming proposal:

I recommend that the Congress enact legislation to provide: (a) authority for an adequate research program on the causes, effects, and control of air pollution, (b) project grants and technical assistance to State and local air pollution control agencies to assist in the development and initiation or improvement of programs to safeguard the quality of air, and (c) *authority to conduct studies and hold public conferences concerning any air pollution problem of interstate nature or of significance to communities in different parts of the Nation*. Legislation along these lines has already passed the Senate, and I urge final favorable action in this Congress.¹¹⁰

¹⁰⁸ Birmingham Hearing, 36-59 (PHS testimony), 60-76 (local testimony).

¹⁰⁹ *Id.*

¹¹⁰ JFK, Special Message to Congress on National Health Needs, 1962 Pub. Papers 171 (Feb. 27, 1962). Of interest, Kennedy also proposed a “National Environmental Health Center . . . to provide a central focal point for nationwide activities in the control of air pollution, water pollution, radiation hazards, and occupational hazards” – something that would not be accomplished until the EPA was created in 1970.

Thereafter, in weekly legislative updates on “Legislative Items Recommended by the President,” the White House tracked the progress of the air pollution bill as a “minor proposal for 1962,” among about fifty other priorities for the administration that session.¹¹¹

2. Urban Affairs (February 1962)

A consensus air pollution bill was thus in the works and would address a significant urban affairs problem. But before that, the Kennedy administration attempted something even bigger for his city supporters: Kennedy issued reorganization plans that would have created the Department of Urban Affairs and Housing, elevating existing federal functions in these areas to a cabinet-level department. The effort was modeled on Eisenhower’s successful work to elevate the FSA to HEW, but the outcome was very different. After a battle in the House, Kennedy’s proposals were rejected. For the purposes of this Article, the debacle – and at the time it was a debacle – is relevant for two reasons: first, because the proponents of an urban affairs department consistently pointed to air pollution, among many other problems, as the kind of issue that cities needed federal assistance for, and, second, because it added air pollution to the anti-statist conservative target list for the first time.¹¹²

This targeting occurred in conservative periodicals and newspapers and was transmitted to Congress via conservative members. In “Washington Reaches for Your City Hall,” the *Nation’s Business*, published by the U.S. Chamber of Commerce, cited air pollution among the many unnecessary federal programs that a Department of Urban Affairs would promote. In “Goal for the United States: Planned Economy, Kennedy Style,” *U.S. News & World Report* directly associated urban pollution control with planned-economy communism. The latter article was submitted to Congress with some characteristic criticism from a conservative Texan: “This Congress faces a tremendous challenge in saving the American way of life in face of the pressures by the administration to experiment with total planning and total controls. I hope we have the courage to resist this attack on our free competitive system” In similar vein, a Wyoming newspaper said of Kennedy’s proposed public health programs: when the federal government “implies that we are neither

¹¹¹ On Larry O’Brien: Abigail Malangone, Newly Processed Collection: Lawrence F. O’Brien Personal Papers, *Archivally Speaking: An Inside Look at the JFK Library Archives* (Sep. 23, 2014), online [here](#); Albin Krebs, *Lawrence O’Brien, Democrat, Dies at 73*, THE NEW YORK TIMES, Sep. 29, 1990, <https://www.nytimes.com/1990/09/29/obituaries/lawrence-o-brien-democrat-dies-at-73.html> (last visited Aug. 1, 2020). The Legislative Items reports are in the JFK Archives: Papers of John F. Kennedy. Presidential Papers. President’s Office Files. Legislative Files: February 1962, March 1962, April 1962, May 1962, June 1962, July 1962, and August 1962; Box 050, Folders 007, 011, 013, 014, 016, 017; Box 051, Folders 005, 006, 007, 008.

¹¹² On the JFK reorganization effort and its failure, see HENRY B HOGUE, PRESIDENTIAL REORGANIZATION AUTHORITY: HISTORY, RECENT INITIATIVES, AND OPTIONS FOR CONGRESS, Rep. No. 7–5700 (2012). For the plan itself and the issues it raised, see *Reorganization Plan No. 1 of 1962 to Create a Department of Urban Affairs and Housing: Hearings before the House Committee on Government Operations* (Feb. 6–8, 1962). The House debate took place over three days: *Proposed Department of Urban Affairs*, 108 Cong. Rec. 2417–22 (Feb. 19, 1962); *Motion to Discharge Government Operations Committee from Further Consideration of Senate Resolution 288, Opposing Reorganization Plan No. 1 of 1962*, 108 Cong. Rec. 2527–72 (Feb. 20, 1962); *Disapproving Reorganization Plan No. 1 of 1962 – Department of Urban Affairs and Housing*, 108 Cong. Rec. 2629–80 (Feb. 21, 1962). The vote is at 108 Cong. Rec. 2680. The Department of Housing and Urban Development (HUD) was eventually established in 1965, after Kennedy’s death.

responsible or able as citizens to solve air pollution problems, environmental health problems, research problems and child health problems in no other way than through Federal means, then we feel stripped. [It] tells us we as individuals, and as a nation are inadequate to the challenge.”¹¹³

That is, Kennedy’s 1962 effort to create a new Department of Urban Affairs drew criticism that associated federal involvement in domestic urban matters, including air pollution, with communism. This was the language of the Cold War conservative right. Although pollution control was not the primary target of the invective, it was repeatedly held guilty by association. The House Health and Safety Subcommittee was unlikely to have missed this fact. Among the members of that Committee, all of the Republicans and both Southern Democrats, including Rep. Roberts, voted against the new department.¹¹⁴

3. The House Consolidated Bill (March to June 1962)

On March 1, 1962, two days after Kennedy’s message on public health and a week after the House had defeated Kennedy’s departmental proposal, Rep. Roberts submitted a consensus air pollution bill to the House.¹¹⁵

Textual analysis demonstrates that the new bill was largely a reworking of the AMA’s “weak” proposal. It incorporated a small but significant shift in emphasis for the role of the federal government, as one of providing “national leadership in the development of cooperation of Federal, State, and local programs for the prevention and control of pollution,” and it retained and expanded on the AMA’s proposed instructions to the Surgeon General to foster “cooperation” between all federal and state authorities working on air pollution, and to support research, investigation, and personnel training. The grants-in-aid program would support the “development, initiation, or improvement” of state air pollution control programs. The bill’s proposed conference process was truncated but consistent with the Flemming proposal. It carried an anodyne title that mirrored the

¹¹³ 108 Cong. Rec. A251 (Jan. 17, 1963) (extended remarks of Sen. Karl Mundt (R-SD)), *reprinting* “Washington Reaches for Your City Hall,” *The Nation’s Business* (1963). 108 Cong. Rec. A674 (Jan. 30, 1962) (extended remarks of Rep. Bruce Alger, *reprinting* “Goal for United States: Planned Economy, Kennedy Style,” *U.S. News & World Report* (Jan. 30, 1962). 108 Cong. Rec. A2040 (Mar. 19, 1962) (extended remarks of Wm. Henry Harrison III (R-WY)), *reprinting* “Editorial: Stripped by Implication, Enticement,” Sheridan Press (Mar. 19, 1962). On the conservative political leanings of these Congressmen, see “Mundt, Karl (1900-1974)” in *Encyclopedia of the Great Plains* (2011), online [here](#); Sam Roberts, *Bruce Alger, 96, Dies; Led ‘Mink Coat’ Protest Against Lyndon Johnson*, THE NEW YORK TIMES, Apr. 28, 2015, <https://www.nytimes.com/2015/04/29/us/politics/bruce-alger-former-congressman-whose-protest-against-lyndon-johnson-backfired-dies-at-96.html> (last visited Aug. 1, 2020); *Former U.S. Rep. William Henry Harrison, Descendant of Presidents*, AP NEWS, <https://apnews.com/5760ec5b95334a65f73052584899a8b5> (last visited Aug. 1, 2020).

¹¹⁴ 1962 Cong. Rec. 2680 (Feb. 21, 1962) (House vote).

¹¹⁵ The house consolidated bill was H.R. 10519, 87th Congress (Roberts, D-AL) (Mar. 1, 1962), *ref’d to House Commerce Committee* 108 Cong. Rec. 3128 (Mar. 1, 1962). It is not clear who exactly drafted it. Ripley calls it the “administration bill.” Ripley, *supra* note 4 at 236. It had PHS support. *Air Pollution: Hearings before the House Health and Safety Subcommittee* (“June 1962 Hearing”), at 1 (June 25, 1962). The Bureau of the Budget also reviewed it, and “approved [a] draft . . . which [was] expected to be transmitted to [the] Hill . . .” Larry O’Brien, *Legislative Items Recommended by the President* (Feb. 26, 1962), *supra* n. ___. See also June 1962 Hearing, 14. HEW sent it to the House the next day. June 1962 Hearing, 15-19.

federal water pollution law: the “Federal Air Pollution Control Act.” Taken as a whole, it envisioned the federal government as an agent for stimulating and supporting state action on air pollution, with an extremely limited federal capacity to mediate when states were in conflict.¹¹⁶

Roberts requested agency feedback on the consolidated bill, and scheduled House hearings to introduce and discuss it. The executive office responses expressed universal support for the bill, citing the President’s recent message on health. The hearing itself was only a half hour long and consisted primarily of supportive statements from interested congressmen. In his opening comments, Rep. Roberts mentioned that the Surgeon General’s had filed a report on automobile exhaust pollution earlier in the month, and that the proposed legislation before the committee would make possible the additional research proposed in that document. It appeared that everything was ready to go.¹¹⁷

4. Roberts Delays (June to December 1962)

And then, Roberts killed the consolidated bill. Bailey, ever suspicious and believing that Roberts never supported increased federal authority, claims that he “used the lack of consensus among the [June 1962 hearing] witnesses to suggest that further time was needed to study the proposals.” This is unpersuasive, however, in part because Roberts never said so and in part because there was no such lack of witness consensus. Ripley states simply that Roberts “by the middle of the summer felt that his subcommittee needed more time to study [the proposals in the consolidated bill] before approving them.”¹¹⁸ Neither cite Roberts himself, who provided his own explanation:

An administration proposal for a comprehensive program [i.e., new authority for PHS] was submitted by the Secretary of Health, Education, and Welfare in February 1962. Unfortunately, sufficient time for adequate hearings on a problem of such far-reaching nature was not available during the current session. The Subcommittee on Health and Safety, of which I am chairman, did devote sufficient time to the subject, however, to conclude that the interests of the country would be best served by postponing legislative proposals for a broader type of air pollution program until proper hearings can be conducted. I wish to give assurance that such hearings will be held in time to permit congressional action early in the next session. . . .¹¹⁹

That is, Roberts located his decision to delay in the inability of his committee to hold hearings on the subject of expanded federal power. He also then gave his word that he would hold those hearings in the next Congressional session. Especially since he did conduct the hearings, and then

¹¹⁶ Compare H.R. 10519 §§ 1(c), 3(a), (b), 5 with “League” Bill §§ 3, 4, 8. [redline comparisons on file with author].

¹¹⁷ On executive support, see June 1962 Hearing at 9-20. On timing of hearing, *id.* at 1, 28 (convening 10:15, adjourning 10:45). For Roberts’ statement, *id.* at 20.

¹¹⁸ BAILEY, *supra* note 4 at 103; Ripley, *supra* note 4 at 236.

¹¹⁹ 1962 Cong. Rec. 19660 (Sep. 17, 1962).

oversaw the passage of an even more robust bill the next year, there seems to be sufficient evidence to consider taking him at his word. At the time, however, the outcome was that the House delayed consideration of any major programs. To accomplish the delay, Roberts introduced a “clean bill” to extend the 1955 research program for another two years, which was then passed. Thus, at the end of the 1962 legislative action on the matter, the only concrete results were a two-year research extension bill. Ripley reports that the administration was upset with this outcome, and that their planned air pollution conference – where they had intended as a celebration of the enactment of the 1962 law – then needed to be altered. This may have been the case among those who were heavily invested in the specifics of the proposal, but Kennedy’s legislative team at least chalked it up as a small success for the purposes of the coming midterm elections. Kennedy, for his part, had his mind on other matters: the Cuban Missile Crisis, the most important event of his presidency and arguably of the twentieth century, began a week later, and air pollution legislation was not a matter of immediate concern to his cabinet.¹²⁰

The November 1962 midterm elections did not change the balance of power in Congress – the Democratic party retained slim majorities in the House and Senate, and Rep. Roberts retained his chairmanship. In rapid succession, however, the leadership of the Senate Public Works committee changed – long-time chair Sen. Dennis Chavez (D-NM) passed away on November 18, 1962, and his replacement as chair, Sen. Robert Kerr (D-OK) passed away a month later. Sen. Patrick McNamara (D-MI) succeeded them, and among his first acts was to appoint a relatively obscure Senator, Sen. Edmund Muskie (D-ME), to the Public Works Committee’s newly formed Special Subcommittee on Air and Water Pollution. Finally, Kennedy’s HEW Secretary Abraham Ribicoff, had resigned to run for Senate in Connecticut, and had won. The Senate, then, would gain two vocal advocates for air pollution control.¹²¹

5. The Opposition Emerges (December 1962)

Legislation would have to wait until 1963. But there was still a national conference on air pollution to attend. On December 10-12, 1962, over 1,500 people convened in Washington, D.C. to discuss the latest developments in research and administration – almost 500 of them from industry. During this conference a significant debate arose among the participants regarding the appropriate role of the federal government in air pollution – including the emergence, for the first time, of a coordinated opposition to expanded federal power, led by business interests and the highly conservative National Association of Manufacturers.¹²²

¹²⁰ The “clean” bill: H.R. 12833, 87th Cong. (Aug. 8, 1962), reported in House Report No. 2265 (Aug. 23, 1962), debated in House and passed to Senate 108 Cong. Rec. 19662 (Sept. 17, 1962), passed in Senate 108 Cong. Rec. 20,802 (Sept. 26, 1962), indicated signed 108 Cong. Rec. 23,473 (Oct. 13, 1961), recorded as Pub. L. No. 87-761.

¹²¹ On the Senate developments: Blomquist, *supra* note 6.

¹²² A complete transcript of the conference was published as PHS, NATIONAL CONFERENCE ON AIR POLLUTION: PROCEEDINGS (1962). For dates and attendance figures: *id.* at x, xiii to xviii.

The conflict emerged into the open on the conference's first day, in the afternoon's plenary session. In a framing similar to Kennedy's recent speech exhorting the nation to land on the moon, Sen. Harrison Williams (D-NJ) began to criticize the conference attendees for setting their sights too low on air pollution, and of being over-focused on research to the detriment of progress. He argued that "research is worthless unless it is accompanied by a desire and a determination to translate the fruits of it into action," and said that he thought that "our goal ought to be the elimination of air pollution by the end of the sixties, and not just the elimination of our ignorance about the problem." The "fundamental issues" were "money and the enforcement of air pollution control." The states, he said, "are often vulnerable to threats by an air pollution industry to move somewhere else where, as they say, the public officials are 'more understanding,'" and the federal role was necessary to overcome this. His remarks received immediate objection from a NAM spokesman, as well as several representatives from the pulp and paper industry. NAM had come to Washington to promote the pollution control experience in Pittsburgh, which, it argued, had demonstrated the possibility of solutions "without remote centralized control from Washington." Williams held his ground, arguing that he supported "some stimulation" in the area from the federal government. A representative from Weyerhaeuser quipped that "[i]t's very seldom that the Federal Government stops stimulating, once they start stimulating." The conversation then moved on.¹²³

The argument picked up again on the second day, which was devoted to panel discussions. The panel on "Applying Our Legislative and Regulatory Know-How" tackled the question: "Do we have the legal weapons with which to combat air pollution; and, if so, how should we use them?" In response, Rep. Roberts himself gave a speech he titled "The Role To Be Played by the Federal Government." In it, he appeared to come down squarely on the conservative side of the enforcement issue, while holding space for an expanded federal role in other respects: "it would seem that abatement and enforcement programs to be effective must remain the responsibility of States and local governments, but there is a vast field in the area of research and the dissemination of information where the Federal Government must continue to take the lead." He prefaced his comments, however, by arguing that "no one doubts" that "authority exists to expand the Federal role . . . if Congress in its wisdom feels that an expansion is necessary and would produce desired results. The welfare and commerce clauses of the Constitution vest great authority in the Federal Government to promote commerce and protect health and property in the public interest. . . . We legislate in the field of health to promote the general welfare" He continued, however, to qualify this: "let me say that I do not think the Federal Government has any business telling the

¹²³ The Williams speech and industry responses, is at PHS, *Id.* at 30–37. For the affiliations of the speakers, *see id.* at 433–36. In the 1980s, Sen. Williams was convicted of taking bribes during the FBI's Abscam operation, resigned from Congress before being expelled, and spent time in prison. Douglas Martin, *Ex-Senator Harrison A. Williams Jr., 81, Dies; Went to Prison Over Abscam Scandal*, THE NEW YORK TIMES, Nov. 20, 2001, <https://www.nytimes.com/2001/11/20/nyregion/ex-senator-harrison-a-williams-jr-81-dies-went-to-prison-over-abscam-scandal.html> (last visited Aug. 1, 2020). For JFK's speech, *see* Address at Rice University on the Nation's Space Effort, Papers of John F. Kennedy. Presidential Papers. President's Office Files. Speech Files. Address at Rice University, Houston, Texas, 12 September 1962, <https://www.jfklibrary.org/asset-viewer/archives/JFKPOF/040/JFKPOF-040-001>.

people of, say, Birmingham or Los Angeles how to proceed to meet their air pollution problems.” The panel Q&A was dominated by industry speakers, each arguing against the federal government’s enforcement authority and praising Rep. Roberts’ statement as reflecting their own views.¹²⁴

Another sally came that evening, when none other than Arthur Flemming took the stage during the dinner. Among other things, he argued the same position he had been arguing for years: “the Federal Government should be given enforcement authority in air pollution comparable to the authority it now has in water pollution.” Flemming, however, moved beyond his initial proposal, to a position more in line with the legislative developments of the last year. After a fact-finding conference, he argued, the HEW Secretary “it seems to me, should have the right to issue orders based on the recommendations of the board and which would become operative after a reasonable period of time had elapsed. The recipients of the orders should have the right to appeal to the appropriate U.S. Circuit Court of Appeals within a specified period of time. If the orders are not appealed or if they are appealed and affirmed but are not complied with, the [HEW Secretary] should be able to refer the matter for appropriate action to the Department of Justice.” This was the procedure in the 1961 FWPCA amendments that had formed the basis for the AMA’s “weak” bill, and had been incorporated into the House consolidated bill prior to Roberts having killed it. Flemming saw “no reason at all” why the federal government should not have the same authority in the air and water pollution contexts. To those who disagreed, he said: “I submit to you that there is still too much evidence pointing to the fact that there are those who put selfish economic interests ahead of the health of our Nation and resent and resist the efforts of others who put the health of the Nation ahead of all other considerations.” He pleaded: “Let’s make up our minds that we are going to use all of our resources in order to do something significant in this generation. Let’s not wait until tragedy again strikes. Let’s get action at the next session of Congress.”¹²⁵

The controversy boiled over in the final session. PHS, as was its practice at the time, had hired an ABC broadcaster to present a “layman’s view” summary of the entire conference, and then had assisted him to prepare remarks. The first problem was that they engaged Howard K. Smith, an ABC journalist who had recently aired a program titled “The Political Obituary of Richard M. Nixon,” The show had been hugely controversial, particularly on the conservative right, for its inclusion of comments by convicted perjurer and suspected Soviet spy Alger Hiss. And then Smith tackled the conference’s debate over federal authority as follows:

I was struck by a rather strange phenomenon. A considerable number of the delegates seemed to be vigorously attacking a dragon called "Federal enforcement." But in a careful search of the papers presented by practicing members of the Federal

¹²⁴ On the panel’s purpose: Erwin Schulze, Introductory Remarks, PHS, *supra* note 122 at 304. Roberts’ speech and prepared responses: *Id.* at 327–32. Industry reactions: *id.* at 333–36.

¹²⁵ Flemming’s speech: *id.* at 375–77.

Establishment, I never found the dragon. Nor, I understand, does it appear in any of the legislation being proposed by the administration.

Actually the clearest call for increased Federal participation has come from rather unlikely places. Dr. Flemming, a distinguished member of President Eisenhower's Cabinet, espoused a stronger Federal role last night, and the American Medical Association mentioned it favorably in [a] telegram to which I have already referred. . . . Naively, perhaps, I wonder if the attacks on Federal enforcement aren't really attacks on Federal grants which might change dormant programs into active programs.

Besides, when it comes to air pollution, what is local? . . . [O]ur jurisdictional lines traced on the surface of the earth have little relevance. Even those magical boundaries which separate sovereign State from sovereign State cannot check the flow of troubled air. What's a Federal Government for, if not for problems like this?¹²⁶

NAM was outraged. It sent a formal complaint to the conference organizers, criticizing Smith's "sensationalized summary of the conference which managed to distort many of the facts, dramatize the role of the federal government, and undercut the industry, State, and local positions. . . ." Smith had "fully distorted our feeling of the conference's consensus, obtained from the panel summaries, 'that Federal enforcement was not needed and was not wanted.' It was all the more reprehensible as no chance for rebuttal was permitted." PHS responded that NAM's criticism was "regrettable."¹²⁷

It is worth pausing to consider the stakes of this engagement. Between the lines of the statements by Sen. Williams and Secretary Flemming was the idea that the pace of change on air pollution was too slow, that this was the fault of industry, and that it was time to use the federal government to change the situation. Williams challenged the participants to eliminate air pollution by the end of the 1960s. Flemming accused industry of strong-arming state governments to prevent progress. Industry responded by pointing to Pittsburgh, where major change had occurred, according to industry, without federal interference, through industry-local cooperation. NAM believed that the federal government, if empowered to speed the elimination of air pollution, might do so without regard to financial impacts on industry, and was, as explained above, an organization rather fiercely committed to conservative politics, and particularly anti-statist and pro-capitalist conceptions of U.S. government. The tensions between voluntary self-regulation, industry regulatory capture, marketplace incentivization, and direct regulation, that would characterize environmental regulation

¹²⁶ Smith's speech: *id.* at 418-20. On Smith: Richard Goldstein, *Howard K. Smith, Broadcast Newsmen, Dies at 87*, THE NEW YORK TIMES, Feb. 18, 2002, <https://www.nytimes.com/2002/02/18/obituaries/howard-k-smith-broadcast-newsmen-dies-at-87.html> (last visited Aug. 1, 2020).

¹²⁷ PHS, *supra* note 122 at 429-30.

in the following decades, began to emerge in 1962, as idealists began to set their sights on a moonshot for air pollution, and conservative industry sought to defend the status quo.

F. 1963: Calling the Question

At stake in 1963 was the question that had just been debated at the national air pollution conference, that Rep. Roberts' Subcommittee had been asking in various ways for several years, and that had been hinted at ever since Donora: *should the federal government be allowed to begin acting independently to eliminate the nation's air pollution?* As 1963 began, Rep. Roberts stood in evident doubt, although his commitment to holding hearings on the subject was undeniably genuine. In the Senate, Edmund Muskie was gearing up to investigate the question himself. In the White House and at PHS, opinions on the subject were mixed. Industry opposition had begun to organize. As the year began it was impossible to tell how things would end.

1. Voices of the New Year (January and February 1963)

As was always the case, the new Congress brought new bills. This time, they came from the Senate, and there were two competing proposals. The first was almost identical to the prior year's House consolidated bill. The second, submitted by newly sworn-in Sen. Abraham Ribicoff was a major reworking of the older bill.¹²⁸

Although in legislation the credit often goes to the person who pushed a bill over the finish line, readers of this Article can now perceive the Ribicoff bill's genesis elsewhere. Since it was built on the House consolidated bill, it must necessarily be traced to Hugh Mields' efforts to consolidate scattered air pollution authorities and translate FWPCA's pollution control processes, which efforts had been carried forward by legislators from both parties from California, New York, Pennsylvania, and beyond, for years, and shepherded, however slowly, through Rep. Roberts' committee. This was also true of the Ribicoff bill's most important "new" contribution: a section titled "Enforcement Measures Against Air Pollution" that empowered the federal government to call conferences when air pollution threatened the public health and welfare, and to initiate abatement actions if, in its judgment, timely progress was not made. This was a near-verbatim copy of the language that had first been introduced in the "Halpern" bill in 1961, i.e., the "strong" AMA proposal, i.e., Hugh Mields' translation of FWPCA's 1961 enforcement provisions. Throughout the proceedings that would follow, no legislator would ever discuss this provenance. Nonetheless, the urban lobby finally had been successful in securing legislative support in its long-running effort to expand the federal government's air pollution enforcement powers.¹²⁹

¹²⁸ S. 444, 88th Cong. (Jan. 23, 1963) (multiple sponsors); S. 432, 88th Cong. (Jan. 23, 1963) (Ribicoff (D-CT) and multiple co-sponsors). NB: Ribicoff also filed two bills related to tax treatment and small business assistance, S. 736, 88th Cong. (Feb. 7, 1963) and S. 737, 88th Cong. (Feb. 7, 1963), which did not proceed.

¹²⁹ [redline comparisons on file with author.] The "Halpern" bill is discussed in section ___, *supra*.

This Congressional support was intertwined with support within the Kennedy administration, which endorsed the Ribicoff bill in early February. This announcement followed a great deal of debate, dissent, and discussion within PHS and Kennedy's legislative offices, and arguments put to Kennedy himself. The administration's decision was revealed in the 1963 health message, which urged the adoption of legislation that would authorize PHS to "take action to abate interstate air pollution along the general lines of the existing water pollution control enforcement measures." The Democratic administration would thus make its mark in the air pollution field by expanding federal power, in accordance with the program of the urban lobby, and against anti-statist and pro-business conservative opposition. According to Ripley, the details of the enforcement authority were less important to the White House legislative office than that "it *does* something, and indicates forward movement" on air pollution.¹³⁰

Two weeks later, Rep. Roberts filed his own bill. It was, with many small amendments, a copy of the Ribicoff bill, and it contained the "strong" enforcement language that had now been endorsed in the Senate and by the administration. Whatever Roberts had thought of the issue when he spoke at the air pollution conference two months earlier, he was not as committed to his reasoning as he had appeared. When reminded of his earlier statements, Roberts would only say: ". . . there are two views about consistency. It has been said that 'consistency, thou art a jewel.' It has also been said the 'consistency is a hobgoblin of little minds.' Finally, someone said, 'The wise man changes his mind and the fool never does.'" He also referenced a recent severe smog event in London but offered no other public explanation. Roberts, a states' rights advocate, had decided to support the expansion of federal power.

Once Roberts was convinced, the likely outcome changed immediately – the bill now had the support of the Democratic party, which held the presidency and both houses of Congress, support from a key Southern Democrat to sway the more conservative members of that party, and enough support among moderate Republicans to survive any Democratic defections.¹³¹ It was time to conduct a hearing, bring the matter to the floor, and call the question. This would be facilitated by one final key change introduced in the Ribicoff bill, and carried forward into Rep. Roberts' bill and all

¹³⁰ JFK, Special Message to the Congress on Improving the Nation's Health, 1963 Pub. Papers 140, 145 (Feb. 7, 1963). Ripley devotes a great deal of time to the machinations within the Kennedy administration that resulted in their support for the strong bill. In brief, Ripley credits the effort to recruit Kennedy to support stronger enforcement provisions to Dean Coston of the Office of Legislative Affairs (see n. __, *supra*), with resistance coming from within PHS, and the Bureau of the Budget. As always, however, while Ripley's work is clearly built on primary sources, it is uncited and therefore impossible to verify today without substantial archival work. Ripley, *supra* note 4 at 238–49. The House bills: H.R. 3507, 88th Congress (Fulton, R-PA) (Feb. 7, 1963) (identical to S. 432); H.R. 4061, 88th Cong. (Rodino, D-NJ) (Feb. 21, 1963) (same). [redline comparisons on file with author].

¹³¹ The Roberts bill: H.R. 4415, 88th Cong. (Feb. 23, 1963). Rep. Halpern, who had filed the strong bill in 1961, submitted an identical copy: H.R. 4750 (Halpern, R-NY) (Mar. 11, 1963). Roberts' statement: *Air Pollution: Hearings before the Health and Safety Subcommittee* ("March 1963 Hearing"), at 184 (Mar. 18, 1963).

subsequent versions of the law: a better title. What had been “the Federal Air Pollution Control Act” would now be called “the Clean Air Act of 1963.”¹³²

2. The Opposition Speaks (March 1963)

In March 1963, the House Health and Safety Subcommittee heard two days of testimony squarely on the question of whether the federal government should expand its air pollution program – and especially whether an expanded program should include new enforcement authorities like those now proposed in the Clean Air Act. Of particular interest, the Subcommittee heard a series of arguments in opposition to the bill – the first time that opponents of federal air pollution legislation had presented their arguments in such a forum.

With Kennedy’s health message as guidance, the bill received strong support from all of the federal executive offices. Whatever the prior internal debate had been, PHS head Ivan Nestingen began the proceedings with a policy argument for federal abatement authority, which he described as “law enforcement” and likened to other air pollution control mechanisms. He said that although the power was to be used sparingly, it would be necessary for overall success of any air pollution control program: “Generally speaking, enforcement is the last control device to be applied, and it will be required in only a few situations in most communities” but . . . “[w]hen such actions are required . . . it is of the utmost importance that they be soundly based and forcefully prosecuted. Otherwise they will command no respect, either in the community or in the courts, with the result that the total control program will lose force and effectiveness.” The “exercise of common sense and good judgment will minimize the situations that will require such actions to be brought,” but were necessary now because “we are just not moving fast enough” on air pollution. “In the industrial and technical revolution which is occurring in our modern times, and will continue in the immediate years ahead, we will not move fast enough unless there is greater federal authority in this field.” Nestingen did not address the fact that under the new law the federal government would not have any *other* air pollution control mechanisms at its disposal.¹³³

Against this overall justification, and among a great deal of additional supportive testimony from friendly witnesses, two interest groups presented their opposition, one each from government and industry. The government opposition came first from the states wary of municipal-federal dealings that would undercut the states’ powers and articulated the National Association of Attorneys General. The State AGs described the law’s proposed conference authority as “a roving commission [for PHS] to study and criticize the actions of particular agencies of a State or local government in its

¹³² S. 432 § 13. Although the two laws were very different, the name was borrowed from the U.K.’s 1956 response to the London smog event of 1952. *See* Clean Air Act 1956, 5 Eliz. 2 c. 52, § 37 (title), <http://www.legislation.gov.uk/ukpga/Eliz2/4-5/52/enacted>.

¹³³ Executive support for the bill: March 1963 Hearing, at 14 (Department of Agriculture), 15 (Office of the President), 16 (Department of Commerce), 17 (Department of Defense), 22 (Department of Interior, Dept. of Labor (strongly)). Nestingen statements: *id.* at 31, 34, and 36.

own discretion,” which would “encourage friction and irresponsibility,” which, they argued, could “do severe damage to, or even completely subvert State and local efforts to regulate polluters.” They argued that the bill should focus solely on promoting interstate cooperation, rather than providing “machinery for ousting of local and State jurisdiction . . . on the basis of administrative discretion.” Other opponents in government pointed to negative experiences with the conferences that had already been held under FWPCA. To state politicians, the problem with this was “that the local agencies, interstate agency and the States were indicted as far as the public was concerned, and most of them never read that [the PHS review concluded that] there was an active [i.e., sufficient, air pollution control] program taking place.” The Subcommittee was generally sympathetic to these concerns and discussed their intention to place clear limits on the circumstances under which federal enforcement could occur.¹³⁴

Industrial interests (except for manufacturers of pollution control devices) were hostile to the bill. Some submitted brief but strongly worded oppositional statements. The California Chamber of Commerce argued: “Much of the bill is an unwarranted (and probably unconstitutional) intervention into a legislative area reserved by the Constitution to the various States.” The Farm Bureau Federation submitted a warning against “yield[ing] to the pressure of federalization and further debas[ing] our currency with unbalanced budgets in the process of finding the complete answer to air pollution.”¹³⁵ But by far the most coordinated opposition came from the National Association of Manufacturers.

The NAM arguments against the Clean Air Act were delivered by Daniel W. Cannon, an attorney who had started his legal career at a coal mining subsidiary of U.S. Steel and later become general counsel of the Bituminous Coal Operators Association, who had joined NAM in 1958 and who would later serve as NAM’s director of environmental affairs.¹³⁶ Following the December 1962 air pollution conference, at which Cannon had been one of the industry interlocutors on the topic of air enforcement powers, NAM had published a short opinion piece in its association journal, titled “Local Action Best on Air Pollution,” that gave a preview of its position:

Well, we can still breathe, can’t we—without federal supervision? Yes, but perhaps not for long. Despite the marked success local communities have had in curbing air pollution, attempts have been made and will be renewed to put the federal government in control of the air in our own back yards – at the enormous expense federal programs usually call for. . . .

From all past experience in fighting air pollution, one fact is clear: the surest and most effective way to combat air pollution is through cooperative community action.

¹³⁴ AG statements: *id.* at 85-86. Interstate Sanitation Commission argument: *id.* at 117. *See also* Florida Air Pollution Control argument, *id.* at 123-24.

¹³⁵ California Chamber of Commerce statement, *id.* at 397. Farm Bureau Federation, *id.* at 105.

¹³⁶ *Obituary: Daniel W. Cannon*, THE MONTCLAIR TIMES, Sep. 24, 1998, at 17.

This has been proved, in a most difficult test – the Pittsburgh-Allegheny County smoke abatement campaign. But that is not all; the methods used in what used to be called “the Smoky City” are being successfully demonstrated in many other American communities.

According to a NAM publication titled “Cinderella city,” industry in Pittsburgh had voluntarily spent millions on pollution control and, in cooperation with local authorities and the citizenry, had taken a series of largely voluntary actions that had transformed the city’s air. In contrast, NAM pointed to instances of where PHS’s conduct of water pollution conferences had created conflict with state and local authorities – in Ohio, in Maine and New Hampshire, in Washington state, and in New York and New Jersey. NAM then presented a variety of prior statements in support of state and local control on pollution – beginning with the first section of the 1955 Air Pollution Control Act and ending with Rep. Roberts’ own nearly identical statement only three months earlier. In other words, according to NAM, the traditional way could work and was already federal policy in air pollution; the new water pollution control paradigm had problems and should not be expanded too hastily to the air pollution control context. Other industry organizations agreed and presented variations on NAM’s arguments.¹³⁷ The Manufacturing Chemists’ Association argued that the air pollution problem was different from water pollution, and therefore should not be subject to similar authorities. The American Petroleum Institute and Western Oil and Gas Association submitted that federal requirements would place decisions in the hands of unaccountable, unelected officials who would not take account of local economic factors. Bethlehem Steel elaborated:

[This is] more than a States rights proposition. We feel that the State and local governments are far more familiar with the interests within the State and its communities, their economies, and their problems than is the Federal Government. State and local authorities will more readily receive the cooperation of the polluters in those communities . . . ; they will be able more successfully to persuade the polluters to make the necessary corrections, and they will be more readily received when enforcement measures shall be required to be taken. The Federal Government, on the other hand, will be a relative stranger to all these matters, will be looked upon with some suspectedness and lack of cooperation, and will run into a militant opposition should it attempt to saddle a community with some uniform standards that may be predicated upon studies and conditions in a removed out-of-State community but is not compatible with the economy and the best interests of the community involved. . . .

That is, federal intervention would be confronted with local hostility and would not factor in local economic interests. The Idaho Mining Association, the National Coal Association, American Pulp &

¹³⁷ See *id.* at 171-73, 182-183, 186-93, 196-213). “Cinderella City” was submitted to the House but not reprinted in the March 1963 Hearing record. It is found in the September 1963 Hearing, 236-42.

Paper Association, the American Mining Congress all agreed.¹³⁸ Thus, industry resorted to careful arguments on the value of local government, and located opposition primarily in local anti-statist interests who would not accept the imposition of federal standards. These groups also, of course, faced federal regulation of their operations under any new national air pollution control law. In response, there was evidence presented to the committee on the cost of industry compliance, assuring concerned members that in Pittsburgh and California no business had been forced to close due to new air pollution regulations.¹³⁹ The record does not indicate whether industrial interests found this comforting, but it is doubtful.

3. The Muskie Treatment (September 1963)

Following the March 1963 hearing, Roberts prepared a revised bill, which made minor amendments to the prior version, including several additional checks on the federal government's enforcement authority in response to hearing comments, but which was almost entirely unresponsive to the statements of the state and industrial opposition.¹⁴⁰ It passed the House after a strong debate (see discussion next section) and was then sent to the Senate, where it arrived before Senator Muskie's newly formed Special Subcommittee on Air and Water Pollution. These were the first air pollution hearings in the Senate since 1955 and there was a great deal of catching up to do. The majority of testimony therefore was redundant to what had already been presented in the House, and a great deal of it was supportive and, for the purposes of this discussion, relatively uninteresting. The fireworks began on the third day.

The Special Subcommittee had been working since January and had already gained a reputation for the "warmth" of its welcome. The most striking difference was the tone of Senator Muskie's questions toward special interests appearing before him to oppose legislation. Throughout his work in the House, Rep. Roberts had been invariably polite to his witnesses, and particularly solicitous to those who did not support federal legislation. If he was not deferential, he also did not interrupt, and was never rude. Senator Muskie took a different approach. When confronted with hostile witnesses, he treated them that way, cross-examined them, interrupted them, and argued with them. He went through their statements in detail and criticized the language they used, the arguments they made, and the people they sent. And he was always well prepared.

Together with Sen. Neuberger from Oregon, who was not a member of the committee but was invited for the occasion, Muskie spent hours grilling the Manufacturing Chemists' Association and the National Association of Manufacturers, particularly, on the positions discussed above, and had relatively heated discussions with a number of other industry representatives. The transcripts are entertaining, but it is also important to consider that the confrontational approach was new, and

¹³⁸ *Id.* at 230-31 (MCA), 271-72 (WOGA), 284-85 (Bethlehem Steel), 264-68 (Idaho Mining Assoc.), 289-90 (National Coal Association), 290-92 (American Pul & Paper Assoc.), 292-93 (American Mining Congress).

¹³⁹ *Id.* at 27, 103, 146.

¹⁴⁰ H.R. 6518 (Roberts, D-AL) (May 23, 1963).

although it was to become a hallmark of environmental politics, the industry representatives speaking before Congress in 1963 were caught quite off guard by it. Their pro-business perspectives would no longer be accepted unchallenged. Although much more could be said about Sen. Muskie, and his entry into the field represented an important transition that would redefine not only the politics of the environment, but the politics of opposition to environmental regulation, his impact on the Clean Air Act of 1963, in the end, was minimal. There was never any doubt the Senate would pass it. As had been the case for much of the last decade, the real story happened in the House.

4. Votes and Passage (July to December 1963)

The Clean Air Act's final passage required a debate and vote in the House, followed by a debate and vote in the Senate, a conference between the House and Senate to reconcile the two versions of the bill, and subsequent debates and votes in the House and Senate on whether to accept the conference bill. These occurred in stages, with the first House debate and vote – the most important – actually conducted before the Senate hearings discussed in the prior section. The final votes occurred in November and December 1963.¹⁴¹

The most important of these was the House vote in July 1963. The final vote was 273 in support, 102 against, with 53 voting “present.” 206 Democrats and 67 Republicans voted for the bill. The majority of the “no” votes were Republicans, while the majority of the “present” votes were Democrats.¹⁴² However, given that both parties contained a range of ideology, it is useful to examine the outcome in more detail. In particular, it is possible by 1963 to determine the most conservative members of the House by reference to an ideological index score assigned to them by Americans for Constitutional Action (the “ACA Index”).¹⁴³ Using these scores as a guide, it is clear that party and conservative political voting score were the two primary predictive factors in the vote. In general, the Democratic House members supported the bill, while Republican house members did not. However, all else being equal, conservative Democrats and Republicans (based on their ACA scores) were less likely to support the bill than their liberal or moderate counterparts in both parties.¹⁴⁴

Although the only identifiable geographic pattern in the total vote was a strong tendency for Californians to support the bill, it becomes clearer when the Republican vote is examined alone. Republican opposition was concentrated in the Midwest and plains states, but this was to be expected given that Republicans dominated those delegations. What is more remarkable is that Republicans from California, New York, Pennsylvania, and Wisconsin – i.e., states with major air

¹⁴¹ 109 Cong. Rec. 13258-307 (Jul. 24, 1963) (House debate and vote), 109 Cong. Rec. 22315-34 (Nov. 19, 1963) (Senate debate and vote); 109 Cong. Rec. 23954-24084 (House debate and vote on conference bill).

¹⁴² The vote breakdown and party identities are available at <https://www.govtrack.us/congress/votes/88-1963/h47>.

¹⁴³ For the uses and limitations of ideological index scores, see Emily J. Charnock, *More Than a Score: Interest Group Ratings and Polarized Politics*, 32 *STUD. AM. POLIT. DEV.* 49–78 (2018).

¹⁴⁴ [analysis on file with author]. A linear regression of “yes” votes against Democratic party membership, strong liberal voting record, strong conservative voting record, and voter state showed that democrats were much more likely to vote “yes,” while conservatives were much more likely to vote “no.”

pollution problems, and one with major water pollution problems – were significantly more likely to vote more “yes” than Republicans in other states.¹⁴⁵ What is also remarkable is that the vote demonstrated a major shift among the Southern Democrats. Of the ten Democratic “no” votes, eight were from Arkansas, Louisiana, Mississippi, South Carolina, and Texas. But overall, these state delegations supported the bill – a deviation from their positions on, among other things, the recent vote on the Department of Urban Affairs, and the upcoming vote on the Civil Rights Act of 1964. It is possible that Rep. Roberts’ sponsorship swayed the Southern Democrats, who supported a bill that was developed by one of their own. In the end of the debate, dozens of Southern legislators otherwise opposed to the expansion of federal power voted to permit PHS to begin to fight air pollution in the states.

Following the Senate hearings, some work remained to finalize the final details of the bill, but the overall program would not change from this point forward. The Senate debate and vote took place on November 19, 1963. Although one Senator shared that he had received industry concerns, these were allayed in that chamber by minor amendments from the floor, which were agreed to, and the Senate bill was passed unanimously and sent to conference to be worked out. In her argument for the bill, Sen. Neuberger used terminology that was not yet widespread, but that would become increasingly more so in the years to come: “we are about to come of age in our relationship with our environment.” Environmentalism had come to Congress.

Three days later, President Kennedy was assassinated. The conference between the Senate and the House resulted in a bill that was largely consistent with the Senate’s version, and a second House vote largely acquiesced to the amendments, except for the loss of several additional Southern Democratic representatives. President Johnson signed the bill into law on December 17, 1963.

Conclusion – The Balance of Power Shifts

In summary, between 1948 and 1963 Congress considered whether the federal government should have any independent air pollution abatement power, and eventually decided that it should, albeit under strict limitations. At the time, there was already good evidence that the resulting procedural thicket was not going to work very well. But the details of the process were never as important as the fact that the federal government would have some power to eliminate pollution. Smoke abatement and the local approach had failed. The federal government thus would become committed not only to researching air pollution, but to “doing something” about it. It was clear that many technical details of such a program remained to be worked out – including defensible ambient air quality standards and emissions criteria for key pollutants – but these developments would now

¹⁴⁵ [analysis on file with author]. A linear regression of Republican “yes” vote against strong liberal voting record, strong conservative voting record, and voter state showed that Republicans from California, New York, Pennsylvania, and Wisconsin were more likely to vote “yes” than Republicans elsewhere.

be driven not as a basic research program, but as a national program in the name of public health and the environment.

This transition should be understood as an element of the Kennedy administration's "new frontier" domestic legislative program, and more broadly as a reflection of Kennedy's conception of the use of government to improve society. Although it was never a major priority for the administration, it nonetheless was part of a larger and purposeful shift toward a more proactive and reformist vision of the role of the federal government in domestic affairs, and a rejection of the conservative view of the role of government in the United States. Although the Kennedy administration was content to let others innovate on the legislative particulars, it was open to bold proposals, and supportive of urban interests that themselves were frustrated with the limits of traditionalist federalism. The states were not eager to cede their power to the "bureaucrats in Washington." Businesses, as well, wished to avoid federal intervention. And yet this opposition was outmaneuvered, and the principle of federal primacy in air pollution abatement was first established, in 1963.

This was the conclusion of over a decade of debate on the question of federal power in the air pollution context. After the Donora incident, there had been interest in using the federal government to investigate and resolve disputes, but PHS preferred a larger basic research mandate while working in its traditional role to support states who were responsible for enforcement. Consistent with its fiscal conservatism and disinterest in expanding federal social programs but interest in research, the Eisenhower administration agreed, and the first consensus was to maintain prevailing local-state-federal relationships. Prior to 1960, there were sporadic challenges to this consensus, including a key contribution from HEW Secretary Arthur S. Flemming, but no sustained effort to initiate major changes. In 1960, Kennedy's election provided the urban lobby with new opportunities for legislative entrepreneurship, and the AMA, and particularly one persistent person at the AMA, Hugh Miels, provided key legislative language to Congress and the administration, and then worked from 1960 to 1963 to sustain calls for the federal government to "do something" about air pollution. Although broader efforts at federal intervention in urban affairs faced stiff opposition in the early 1960s, air pollution legislation was facilitated by existing water pollution precedents, and was conceptually separated from other "urban" problems into a distinct category of issue that garnered wider support, or at least less resistance to federal power.

Key legislative entrepreneurs included James J. Murphy (D-NY), Rep. Helen Gahagan Douglas (D-CA), Sen. Thomas Kuchel (R-CA), Secretary Arthur S. Flemming (HEW), and, above all, Hugh Miels, Jr. of the American Municipal Association. Key advocates for legislation included Rep. Paul Schenck (R-OH), and, at the end of the process, Sen. Abraham Ribicoff (D-CT) and Sen. Edmund Muskie (D-ME). Rep. Roberts emerges as a problematic and difficult figure to assess – a states' rights advocate apparently devoted to ideals of public testimony and, ultimately, legislation for the public welfare. In 1964, he would vote "no" on the Civil Right Act of 1964, and would then go on to lose the November 1964 election to a Republican, as Alabama voters turned against the

Democratic Party for its support of civil rights, in a larger pattern of southern political realignment that marked national politics thereafter.

The old guard conservatives had their say during the Eisenhower administration, but by 1960, particularly with the death of Robert Taft and the rise of Barry Goldwater, fiscal conservatism was at a low ebb in the early 1960s. The fiscal concerns of the Eisenhower Administration were not seriously or consistently pursued in the years that followed, and thus those arguments had little eventual purchase on the final debate. Nor, however, was air pollution successfully associated with state control and communism, although attempts were made along these lines. Instead, the states' rights perspective of the Southern Democrats, particularly, and anti-federalists, generally, looms large. Ultimately, it is clear that at the time, the Southern Democrats opposed judicial intervention in Southern apartheid, but also argued for the dominance of Congress, and had no theoretical qualms with the exercise of federal power for to resolve problems shared by the cities of the South. In this, they were actually "less conservative" than the "Jeffersonians" and other more absolutist, anti-statist conservatives, who would come to power in the years ahead.

In 1963, the United States chose to begin to empower its federal government to control air pollution because the alternative – fragmentary local control – was not working. This was the conclusion of those who were there at the time, even those who were not predisposed to expand federal power, and we forget that lesson at our own peril.

Author's note: this Article was written under the San Francisco Bay Area's shelter-in-place order during the novel coronavirus pandemic, summer 2020. Among other things, it suggests further research that would require in-person investigation that cannot be conducted with our nation's archives closed. Although the challenges of scholarship are one of the least important problems of the day, if any event has ever demonstrated the value of federal coordination of a response to a nationwide public health problem, it has been the COVID-19 catastrophe. National coordination, and when required federal preemption, would have spared our country much of its ongoing suffering. As Howard K. Smith might have said: "What's a federal government for, if not for problems like this?"