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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

ROBERT F. BLOMQUIST*

I.	Introduction				
	A.	Ove	erview	. 541	
	B.	The	World and Nation-at-Large: The Tumultuous Sixties .	. 543	
П.	Chairman Muskie Picks up the Pace on National Environmental				
	Action, 1965-66				
	A. Building on President Johnson's Message on Natural Beauty,				
			5		
		1.	President Johnson's February Message and Muskie's		
			Response	. 545	
		2.	Muskie's Leadership in Seeking Cleaner Air and Wate	r	
			During 1965		
	B.	Mai	ntaining Momentum, 1966	. 568	
		1.	President Johnson's Message on Preserving Our		
			Natural Heritage	. 568	
		2.	Muskie's Leadership in Seeking Cleaner Air and Wate	r	
			During 1966	. 575	
		3.	Muskie's Environmental Speeches During 1966	. 591	
Ш.	Muskie's Rise to National Prominence and the Increased				
	Political Salience of American Environmental Issues, 1967-68 59				
	A.	Poll	uters Beware, 1967	. 597	
		1.	President Johnson's Message on Protecting Our		
			National Heritage	. 597	
		2.	Muskie's Leadership in Seeking Cleaner Air and Wate		
			During 1967		
			ε		

^{*} Professor of Law, Valparaiso University School of Law. B.S. University of Pennsylvania (Wharton School), 1973. J.D. Cornell University, 1977. My thanks go to William H. Rodgers, A. Dan Tarlock, Paul Brietzke, and Richard Stith for helpful comments regarding an earlier draft. As always, I am grateful for the love and support of my wife, Teresa Faherty Blomquist.

	3.	Muskie's Environmental Speeches During 1967	635		
В.	Fro	From Environmental Legislator to Vice Presidential			
	Car	ndidate, 1968	640		
	1.	Muskie's Environmental Legislative Leadership			
		During 1968	640		
	2.	Muskie's Selection and Campaign as Democratic VP			
		Candidate, 1968	645		
IV Conclusion					

I. INTRODUCTION

While much scholarship exists on judges and the judicial opinions that they write, there has traditionally been little analysis of legislators and the statutes—and other legislative materials—that they craft. Given the recent widespread interest in legisprudence—the description, interpretation, and philosophy of statutes—it is time for an efflorescence of thoughtful work on the numerous and fascinating connections between prominent legislators and their legislative byproducts. What is the connection between a legislator's political and personal background and ambition, and the quality of the statutes that she writes? What are the various specific roles that legislators play in the legislative process?

If there is such a being as an "ideal judge" is there such a cognate being as an "ideal legislator?" If such an ideal legislator exists, one might call her Themis—the ancient Greek personification of wisdom and justice and law.²

¹ Professor Ronald Dworkin maintained that since law is an "interpretive" practice, the ideal judge, Hercules—in search of the "right answer"—engages in the threefold process of, first, gathering together legal materials relevant to the question at hand, second, advancing a justification for explaining the meaning of the materials assembled in the initial stage, and third, deciding on a justification that puts the law in its best light. *See generally* RONALD DWORKIN, LAW'S EMPIRE (Harv. U. Press 1986) (setting forth a theory of legal interpretation).

² Public choice theorists, convinced that legislator behavior can be explained as just another aspect of selfish, "rent-seeking" bargains, would dispute that there is anything like an ideal legislator, in the Dworkian tradition. Alternatively, civic republican theorists—a more idealistic group than public choice theorists—might accept the concept of an ideal legislator. *See generally* WILLIAM N. ESKRIDGE, JR. ET AL., LEGISLATION AND STATUTORY INTERPRETATION 85-90 (Found. Press 2000) (discussing public choice); *id.* at 77-81 (discussing civic republicanism).

Before fully theorizing on the nature of Themis, however, it would be helpful to gather data and to explicate details on excellence in the legislative process. Of all the American legislators who have ever lived, which one has been the best? My work over the last several years suggests that Edmund Sixtus Muskie of Maine should be on the short list.

A. Overview

In an extensive scholarly project that has thus far culminated in four published articles,³ I have examined the dawning years of modern American environmental law by focusing on the public biography of Edmund S. Muskie of Maine, who rose from his humble origins to graduate from Bates College and Cornell Law School, became an attorney, political activist, state legislator, two-term governor, and, with his election in 1958, a United States Senator.⁴ During his twenty-one year career in the Senate, from 1959 to 1980, Muskie took on numerous national environmental policy roles which ranged from policy entrepreneur to fact-finder; from subcommittee leader to staff

In Greek mythology, Themis was a woman, but like Dworkin's use of Hercules, I have in mind a unisex archetype. Themis was the mother of Prometheus, the god of fire. She was "a wise Titaness, well versed in oracles and laws, and hence the personification of virtue and justice." ARTHUR COTTERELL, THE MACMILLAN ILLUSTRATED ENCYCLOPEDIA OF MYTHS & LEGENDS 243 (A. Marshall ed. 1989). I am currently at work on a more theoretical project that will seek to more fully explain the concept of an ideal legislator. The tentative title for this work-in-progress is *Call Her Themis: Law as Integrity and the Ideal Dworkian Legislator*.

³ See 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 COLUM. J. ENVTL L. 1 (1997) [hereinafter Blomquist, To Stir Up Public Interest]; Robert F. Blomquist, What is Past is Prologue: Senator Edmund S. Muskie's Environmental Policymaking Roots as Governor of Maine, 1955-58, 51 ME. L. REV. 87 (1999) [hereinafter Blomquist, What is Past is Prologue]; Robert F. Blomquist, Nature's Statesman: The Enduring Environmental Law Legacy of Edmund S. Muskie of Maine, 24 WM. & MARY ENVTL. L. & POL'Y REV. 233 (2000) [hereinafter Blomquist, Nature's Statesman]; Robert F. Blomquist, Senator Edmund S. Muskie and the Dawn of Modern American Environmental Law: First Term, 1959-1964, 26 WM. & MARY ENVTL. L. & POL'Y REV. 509 (2002) [hereinafter Blomquist, Dawn].

⁴ For a detailed, but succinct, public biography of Muskie, see Blomquist, *Dawn, supra* note 3, at 510 n.4 (citing Secretary of the Senate, Edmund S. Muskie, Late Senator From Maine, Memorial Tributes, S. Doc. No. 104-17, at ix-x (2d Sess. 1996)).

overseer; from legislative strategist to policy wonk.⁵ Capping his public career with six months of service as Secretary of State under President Jimmy Carter from 1980-81, Muskie also served as an international diplomat for the environment.⁶

The purpose of this Article is to delineate and explain the importance of Edmund S. Muskie's significant environmental activities during the first four years of his second term as a United States Senator, from January 1965 through November 1968 when he, as the Democratic Party nominee for Vice President (along with his runningmate for President, Hubert H. Humphrey of Minnesota,) lost the national election to Richard M. Nixon and Spiro O. Agnew. In the remaining portion of Part I, I shall provide a synopsis of the key political and social events in the world and nation-at-large during 1965-68. In Part II, with principal reliance on original archival documents, I shall discuss Senator Muskie's national environmental leadership activities as Chair of the Special Subcommittee on Air and Water Pollution from 1965 through 1966.⁷ In Part III, I continue my meticulous review of Muskie's papers and Senate documents for the period of 1967 to 1968, with an eye toward describing and assessing Senator Muskie's national environmental leadership in proposing and crafting environmental laws and policies. During this two-year period in the middle of his second term in the Senate, Muskie gained increasing national prominence as an advocate for more enlightened and effective environmental programs. 8 Moreover, it was during this period

⁵ *Id*.

⁶ *Id*.

⁷ See infra notes 44-297 and accompanying text. The archival source of my research for this article is the Edmund S. Muskie Archives and Special Collections Library at Bates College in Lewiston, Maine. My reference to documents in this Archives will refer to the Edmund S. Muskie Archives. For interesting and useful secondary sources on Muskie's environmental law leadership, see J. Clarence Davies III, The Politics of Pollution (W. Publ'g Co., Inc. 1970) (discussing early air and water pollution policymaking in the United States); Scott Hamilton Dewey, Don't Breathe the Air: Air Pollution and U.S. Environmental Politics, 1945-1970 (Tex. A&M Univ. Press 2000) (discussing early air pollution policy in the U.S.); J. Brooks Flippen, Nixon and the Environment (Univ. of N.M. Press 2000) (discussing President Nixon's environmental policymaking from 1969-1974 and the role Senator Muskie played in spurring Nixon to act on the environment); Leon G. Billings, *The Founder*, Envtl. F., May/June 1996, at 23 (discussing Senator Muskie's pivotal role in achieving national consensus on air and water pollution policy).

⁸ See infra notes 298-483 and accompanying text.

that he was nominated for and unsuccessfully ran for the Vice-Presidency.⁹ Finally, in Part IV, I provide conclusions regarding Senator Muskie's environmental accomplishments and excellence as a legislator during the mid-1960s.

B. The World and Nation-at-Large: The Tumultuous Sixties

In 1965—the year that Edmund S. Muskie took his second oath as a United States Senator¹⁰—the rate of foreign and domestic changes accelerated at a dizzying pace from the world of the early 1960s.¹¹ In 1965, President Lyndon B. Johnson orchestrated a vast expansion of America's war in North and South Vietnam, and ordered thirty thousand troops to the Dominican Republic to quell a civil war that Johnson contended threatened to lead to a Communist takeover of the country.¹² Moreover, 1965 was also the year when the Indonesian Army snuffed out "a Communist-inspired coup d'etat,"¹³ the Soviet Union successfully "orbited a two-man space[craft] on a 26-hour flight, during which one of the cosmonauts [became] the first [human] to 'walk' in space,"¹⁴ and the United States Congress, under President Johnson's Great Society leadership, passed a remarkable array of key federal legislation on education, voting rights, housing, and welfare.¹⁵

In 1966, by order of President Charles de Gaulle, France pulled out of the North Atlantic Treaty Organization ("NATO"), ¹⁶ Chinese-Soviet relations deteriorated, ¹⁷ and with the blessing of Chairman Mao Tse-Tung, thousands of militant Chinese teens mobilized into "Red Guard" units to begin pursuing a violent, multi-year program to eliminate all Communist-revisionist measures

⁹ See RON MELDRUM, BATES COLLEGE, A BIOGRAPHICAL NOTE: EDMUND S. MUSKIE (1914-1996) (1998), at http://abacus.bates.edu/admin/offices/muskie_archives/bio.html. ¹⁰ See id.

¹¹ For a summary of key global and national events from 1959 through 1964, see Blomquist, *Dawn, supra* note 3, at 512-14.

 ¹² 2 Cong. Quarterly Serv., Congress and the Nation, 1965-1968: A Review of Government and Politics 4 [hereinafter 2 Congress and the Nation, 1965-1968].
 ¹³ Id.

¹⁴ *Id*.

¹⁵ *Id.* at 3-4.

¹⁶ *Id.* at 4.

¹⁷ *Id*.

³¹ *Id.* at 9.

in China. Also during 1966, America's involvement in the Vietnam War continued to escalate, inflation plagued the United States economy, Senator William Fulbright, Chair of the Foreign Relations Committee, held hearings on the nascent opposition to the Vietnam War, or iots in cities across America erupted in black ghettoes, Congress passed major legislation on automobile highway safety and urban redevelopment, and Republicans were successful in waging a comeback from their devastating defeat in 1964 by gaining a number of governorships and other local political officers.

In 1967, Israel won a rapid victory over neighboring Arab nations in the Six Day War,²⁴ the first human heart transplant occurred in South Africa,²⁵ a Summit Conference between the United States and the Soviet Union on major world issues transpired in Glassboro, New Jersey,²⁶ American opposition to the Vietnam War started to mount,²⁷ the Twenty-fifth Amendment to the United States Constitution was ratified (providing for procedures in the event of Presidential disability and in the event of a vacancy in the office of Vice President),²⁸ the United States space program suffered the deaths of three astronauts in a flash fire during training exercises at Cape Kennedy,²⁹ two blacks were elected mayors in major cities for the first time,³⁰ and President Johnson experienced serious legislative setbacks on his proposals to Congress dealing with "draft reform," "highway beautification," anti-crime measures, federal gun control, and "pipeline safety," among other measures.³¹

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    <sup>19</sup> Id. at 4.
    <sup>20</sup> Id. at 4-5.
    <sup>21</sup> Id. at 5.
    <sup>22</sup> Id.
    <sup>23</sup> Id. at 6.
    <sup>24</sup> 2 CONGRESS AND THE NATION, 1963-1968, supra note 12, at 13.
    <sup>25</sup> Id. at 14.
    <sup>26</sup> Id. at 13.
    <sup>27</sup> Id. at 10.
    <sup>28</sup> Id. at 13.
    <sup>29</sup> Id. at 14.
    <sup>30</sup> 2 CONGRESS AND THE NATION, 1965-1968, supra note 12, at 14-15.
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¹⁸ 2 CONGRESS AND THE NATION, 1965-1968, *supra* note 12, at 4.

During 1968, North Korea seized the American naval surveillance ship, Pueblo,³² "intermittent panic buying" occurred in world gold markets,³³ student protests wracked France,³⁴ and in the United States, civil disorder exploded in a number of American cities due to black dissatisfaction with urban conditions,³⁵ Reverend Martin Luther King, Jr. was assassinated,³⁶ Senator Robert F. Kennedy of New York (running as a candidate for the Democratic Party Presidential nomination) was assassinated,³⁷ and Soviet troops put down a popular uprising in their satellite nation, Czechoslovakia.³⁸

In 1968, "Congress was in a conservative mood... preoccupied chiefly with inflation and crime and disorders in the streets and on the campuses." During the year, however, "Congress enacted a landmark housing and urban redevelopment bill and approved a remarkably strong civil rights law, prohibiting discrimination in most of the nation's housing." Moreover, in 1968 Republicans successfully defeated President Johnson's nomination of Abe Fortas to the Supreme Court, the Democrats endured a disastrous convention in Chicago, marked by police brutality toward young demonstrators in the streets, and the Republicans recaptured the White House, aided by third party run by Governor George Wallace, who siphoned votes from the Humphrey-Muskie Democratic ticket.

- II. CHAIRMAN MUSKIE PICKS UP THE PACE ON NATIONAL ENVIRONMENTAL ACTION, 1965-66
- A. Building on President Johnson's Message on Natural Beauty, 1965
- 1. President Johnson's February Message and Muskie's Response

After taking the oath of office in January 1965, one of President Lyndon B. Johnson's first public acts was to articulate his legislative vision for the

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<sup>32</sup> Id. at 13.
<sup>33</sup> Id.
<sup>34</sup> Id.
<sup>35</sup> Id. at 10-11.
<sup>36</sup> 2 CONGRESS AND THE NATION, 1965-1968, supra note 12, at 11.
<sup>37</sup> Id. at 11.
<sup>38</sup> Id. at 13.
<sup>39</sup> Id. at 12.
<sup>40</sup> Id.
<sup>41</sup> Id.
<sup>42</sup> 2 CONGRESS AND THE NATION, 1965-1968, supra note 12, at 16.
<sup>43</sup> Id. at 21-22.
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American "Great Society."⁴⁴ On February 8, 1965 he delivered a message entitled *Natural Beauty of Our Country* to Congress.⁴⁵ As explained by presidential historian Robert Dallek, "[a] desire to clean up and beautify the environment matched Johnson's eagerness to end poverty, expand educational opportunities, assure access to medical care, reform immigration restrictions, and improve urban centers."⁴⁶ Although President Johnson "had no real priority among [his various Great Society initiatives] . . . it is clear that environmental protection commanded his attention and aroused his best instincts."⁴⁷ In his February 8th message to Congress, President Johnson articulated a lofty vision in juxtaposition with a foreboding menace:

For centuries Americans have drawn strength and inspiration from the beauty of our country. It would be a neglectful generation indeed, indifferent alike to the judgment of history and the command of principle, which failed to preserve and extend such a heritage for its descendants.

Yet the storm of modern change is threatening to blight and diminish in a few decades what has been cherished and protected for generations.

A growing population is swallowing up areas of natural beauty with its demands for living space, and is placing increased demand [for living space] on our overburdened areas of recreation and pleasure.

The increasing tempo of urbanization and growth is already depriving many Americans of the right to live in decent surroundings. More of our people are crowding into cities and being cut off from nature. Cities themselves reach out into the countryside, destroying streams and trees and meadows as they go. A modern highway may wipe out the equivalent of a 50-acre park with every mile. And people move out from the city to get closer to nature only to find that nature has moved farther from them.

⁴⁴ Special Message to the Congress on Conservation and Restoration of Natural Beauty, [1965] 1 Pub. PAPERS 155 (Feb. 8, 1965) [hereinafter Natural Beauty].

⁴⁵ *Id*.

⁴⁶ ROBERT DALLEK, FLAWED GIANT: LYNDON JOHNSON AND HIS TIMES, 1961-1973, at 229 (Oxford Univ. Press 1998).

⁴⁷ *Id*.

The modern technology, which has added much to our lives can also have a darker side. Its uncontrolled waste products are menacing the world we live in, our enjoyment and our health. The air we breathe, our water, our soil and wildlife, are being blighted by the poisons and chemicals which are the by-products of technology and industry. The skeletons of discarded cars litter the countryside.⁴⁸

In typically ambitious fashion,⁴⁹ President Johnson sought a multipronged national solution to the problem of the deteriorating environment, which included enhancement of scenic highways,⁵⁰ acquisition of more public park lands for outdoor recreation,⁵¹ protection of America's wild rivers,⁵² clean up of the Potomac River,⁵³ expansion of recreational trails,⁵⁴ abatement of air pollution,⁵⁵ and water pollution,⁵⁶ and the problem of discarded solid

Air pollution is no longer confined to isolated places. This generation has altered the composition of the atmosphere on a global scale through radioactive materials and a steady increase in carbon dioxide from the burning of fossil fuels. Entire regional airsheds, crop plant environments, and river basins are heavy with noxious materials. Motor vehicles and home heating plants, municipal dumps and factories continually hurl pollutants into the air we breathe. Each day almost 50,000 tons of unpleasant, and sometime poisonous, sulfur dioxide are added to the atmosphere, and our automobiles produce almost 300,000 tons of other pollutants.

In Donora, Pennsylvania, in 1948 and New York City in 1953 serious illness and some deaths were produced by sharp increases in air pollution. In New Orleans, epidemic outbreaks of asthmatic attacks are associated with air pollutants. Three-fourths of the 8 million people in the Los Angeles area are annoyed by severe eye irritation much of the year. And our health authorities are increasingly concerned with the damaging

⁴⁸ Natural Beauty, *supra* note 44, at 155-56.

⁴⁹ While "Johnson said later that had there been nothing for his administration to do but reduce pollution and restore the country's natural beauty, he would gladly have been 'a conservation President.' Johnson would never have been content with only one great challenge during his term" DALLEK, *supra* note 46, at 229.

⁵⁰ Natural Beauty, *supra* note 44, at 159.

⁵¹ *Id.* at 158-59.

⁵² *Id.* at 159-60.

⁵³ *Id.* at 160.

⁵⁴ *Id.* at 160-61.

⁵⁵ *Id.* at 161. According to President Johnson:

waste,⁵⁷ better control of pesticides,⁵⁸ expanded environmental research,⁵⁹

effects of the continual breathing of polluted air by all our people in every city in the country.

In addition to its health effects, air pollution creates filth and gloom and depreciates property values of entire neighborhoods. *The White House itself is being dirtied with soot from polluted air.*

Id. at 162 (emphasis added).

⁵⁶ Natural Beauty, *supra* note 44, at 161-62. According to President Johnson:

Every major river system is now polluted. Waterways that were once sources of pleasure and beauty and recreation are forbidden to human contact and objectionable to sight and smell. Furthermore, this pollution is costly, requiring expensive treatment for drinking water and inhibiting the operation and growth of industry.

In spite of the efforts and many accomplishments of the past, water pollution is spreading. And new kinds of problems are being added to the old:

- Waterborne viruses, particularly hepatitis, are replacing typhoid fever as a significant health hazard.
- Mass deaths of fish have occurred in rivers overburdened with wastes.
- Some of our rivers contain chemicals which, in concentrated form, produce abnormalities in animals.
- Last summer [1964] 2,600 square miles of Lake Erie—over a quarter of the entire lake—were almost without oxygen and unable to support life because of algae and plant growths, fed by pollution from cities and farms.

In many older cities storm drains and sanitary sewers are interconnected. As a result, mixtures of storm water and sanitary waste overflow during rains and discharge directly into streams, bypassing treatment works and causing heavy pollution.

Id.

⁵⁷ *Id.* at 162-63. President Johnson outlined the nature of the burgeoning solid waste problem in America as follows:

In addition to our air and water we must, each and every day, dispose of a half billion pounds of solid waste. These wastes—from discarded cans to discarded automobiles—litter our country, harbor vermin, and menace our health. Inefficient and improper methods of disposal increase pollution of our air and streams.

Id. at 162.

⁵⁸ *Id.* at 163.

⁵⁹ *Id.* at 164.

economic incentives for environmental protection,⁶⁰ government reorganization to foster better federal supervision of the environment,⁶¹ and initiating a White House Conference on Natural Beauty.⁶²

Pressing for specific legislation and ordering new detailed Executive Branch programs, President Johnson told Congress that he recommended new clean water legislation that "[p]rovide[d], through the setting of effective water quality standards, combined with a swift and effective enforcement procedure, a national program to prevent water pollution at its source rather than attempting to cure [water] pollution after it occurs."63 Moreover, President Johnson urged greater funding for state and local water pollution abatement projects, 64 and a greater national fiscal effort to address the undesirable "problems caused by the mixing of storm water runoff and sanitary wastes."65 Informing Congress of his own Executive initiative to combat national water pollution, he noted that the Department of Health, Education and Welfare ("HEW") would undertake a program "to clean up the Nation's most polluted rivers;"66 that federal diplomats would "work with Canada to develop a pollution control program for the Great Lakes and other border waters;"67 and that he considered it a federal priority for HEW to "continue to seek effective and economical methods for controlling pollution from acid mine drainage."68 To help resolve America's air pollution problems, Johnson argued that existing federal statutes needed to be improved to permit HEW "to investigate potential air pollution problems before [they occurred], rather than having to wait until the damage occurs. ... "69 Furthermore, he alerted Congress of his intention to seriously focus on air pollution from automobiles, by "institut[ing] discussions with industry officials and other interested groups leading to an effective elimination or substantial reduction of pollution from liquid fueled motor vehicles."⁷⁰

⁶⁰ Natural Beauty, *supra* note 44, at 164.

⁶¹ *Id*.

⁶² *Id*.

⁶³ *Id.* at 162.

⁶⁴ *Id*.

⁶⁵ *Id*.

⁶⁶ Natural Beauty, *supra* note 44, at 162.

⁶⁷ *Id*.

⁶⁸ *Id.* at 163.

⁶⁹ *Id.* For a brief history of America's pollution prevention law and policy, see Robert F. Blomquist, *Government's Role Regarding Industrial Pollution Prevention in the United States*, 29 GA. L. REV. 349 (1995) (surveying history of pollution prevention in America).

⁷⁰ Natural Beauty, *supra* note 44, at 163.

President Johnson also urged that Congress help with the crafting of legislation to address America's mounting "solid wastes" and "pesticides" problems. 73

Reflecting upon his "thirty-three years of public life," to date, President Johnson concluded his text with a poignant look back in the history of

Continuing technological progress and improvement in methods of manufacture, packaging and marketing of consumer products has resulted in an ever mounting increase of discarded material. We need to seek better solutions to the disposal of these wastes. I recommend legislation to:

- Assist the States in developing comprehensive programs for some forms of solid waste disposal.
- Provide for research and demonstration projects leading to more effective methods for disposing of or salvaging solid wastes.
- Launch a concentrated attack on the accumulation of junk cars by increasing research in the Department of the Interior leading to use of metal from scrap cars where promising leads already exist.

Id.

Pesticides may affect living organisms wherever they occur.

In order that we may better understand the effects of these compounds, I have included increased funds in the budget for use by the Secretaries of Agriculture, Interior, and [HEW] to increase their research efforts . . . so they can give special attention to the flow of pesticides through the environment; study the means by which pesticides break down and disappear in nature; and to keep a constant check on the level of pesticides in our water, air, soil and food supply.

I am recommending additional funds for the Secretary of Agriculture to reduce contamination from toxic chemicals through intensified research, regulatory control, and educational programs.

The Secretary of Agriculture will soon submit legislation to tighten control over the manufacture and use of agricultural chemicals, including licensing and factory inspection of manufacturers, clearly placing the burden of proof of safety on the proponent of the chemical rather than on the Government.

Id

⁷¹ *Id.* President Johnson told Congress in this respect:

⁷² *Id.* at 163.

⁷³ As President Johnson stated in his February 1965 address:

⁷⁴ *Id.* at 165. For a superlative account of President Johnson's years in the United States Senate, see ROBERT CARO, THE YEARS OF LYNDON JOHNSON, MASTER OF THE SENATE (Alfred A. Knopf ed., 2002) (discussing Johnson's rapid rise to Majority Leader in the 1950s and his brilliant legislative generalship).

America's natural and human resources conservation efforts, joined with an inspirational look forward to the future:

[The Tennessee Valley Authority] transformed an entire region that was "depressed." The rural electrification cooperatives brought electricity to lighten the burdens of rural America. We have seen the forests replanted by the [Civilian Conservation Corps], and watched Gifford Pinchot's sustained-yield concept take hold on forest lands.

It is true that we have often been careless with our natural bounty. At times we have paid a heavy price for this neglect. But once our people were aroused to the danger, we have acted to preserve our resources for the enrichment of our country and the enjoyment of future generations.

The beauty of our land is a natural resource. Its preservation is linked to the inner prosperity of the human spirit.

The tradition of our past is equal to today's threat to that beauty. Our land will be attractive tomorrow only if we organize for action and rebuild and reclaim the beauty we inherited. Our stewardship will be judged by the foresight with which we carry out these programs. We must rescue our cities and countryside from blight with the same purpose and vigor with which, in other areas, we moved to save the forests and the soil.⁷⁵

On February 9, 1965, the day after President Johnson issued his message to Congress, Senator Muskie issued a detailed response to the President's address. Muskie's written statement used broad and striking phrases, observing that "President Johnson went to the heart of one of the most critical problems confronting modern man: the threat of manmade [sic] waste to our survival." Muskie opined: "In the air, on our land and in our waterways we

⁷⁵ Natural Beauty, *supra* note 44, at 165. Compare President Johnson's rhetoric on environmental dangers with the rhetorical discourse found in Supreme Court opinions addressing environmental dangers. *See* Robert F. Blomquist, *Witches' Brew: Some Synoptical Reflections on the Supreme Court's Dangerous Substance Discourse*, 1790-1998, 43 ST. LOUIS U. L.J. 297 (1999) (tracing the evolution of the Supreme Court's treatment of dangerous substances as evidenced in the linguistics of the Court's opinions).

⁷⁶ 111 CONG. REC. 2356 (1965) (statement of Sen. Muskie).

have too often dumped the residue of our industry and our affluence without regard to its damage to ourselves and our posterity."⁷⁷ Responding to President Johnson's message from the perspective of an environmental policy leader in the United States Senate, Muskie asserted:

President Johnson has given us a message of inspiration and a program for action. As chairman of the Subcommittee on Air and Water Pollution of the Public Works Committee I was particularly interested in his recommendations for preventing and abating pollution of the air and water. His suggestions were challenging, yet sensible, far-reaching, yet attainable.⁷⁸

On President Johnson's air pollution policy proposals contained in his message, Senator Muskie noted:

The President emphasized the importance of the Clean Air Act of 1963 and stressed the need for additional action in preventing future pollution, in coping with the critical problem of automotive exhausts and in finding improved methods of disposing of solid wastes. Our subcommittee intends to hold hearings on these and other proposals during this session and to press for legislative action on improvements in the Clean Air Act.⁷⁹

Muskie gave the following commentary on President Johnson's proposal for clean water:

In the field of water pollution control and abatement the President stressed those features of the Water Quality Act of 1965, S. 4, which the Senate passed on January 28 [1965]. [President Johnson] stressed the importance of water quality standards, increased grants for sewage treatment projects, improved administration of the Federal water pollution

⁷⁸ Id

⁷⁷ *Id*.

⁷⁹ *Id.* For a discussion of Senator Muskie's involvement during his first term in crafting legislation on air pollution, see Blomquist, *Dawn*, *supra* note 3, at 540-48, 578-611.

control program and a research and development program to cope with the problem of storm and sanitary sewage. In addition he advocated an increase in grant ceilings for grants to State water pollution control programs 80

2. Muskie's Leadership in Seeking Cleaner Air and Water During 1965

Several weeks before President Johnson's February 8th message to Congress, Muskie anticipated and prefigured President Johnson's essential points on air and water pollution. During an interview with a Washington D.C. radio station, Muskie referred to legislative hearings that his Subcommittee on Air and Water Pollution had held during 1964, noting that the testimony made it "obvious that automobile exhaust [was] the largest single cause of air pollution" in the country. He remarked: "My bill on air pollution calls for tailpipe devices on all new cars within six months" with "[a]ll new civilian government cars [required] to be equipped with these devices." Muskie seemed optimistic that the American automobile industry was interested in equipping cars with air pollution devices and that the industry had demonstrated "technical know-how by meeting California's car pollution regulations," which Muskie suggested should be applied as a matter of national law. He

Photochemical air pollution or smog is a problem of growing national importance and is attributable largely to the operation of the motor vehicle. Manifestations of this type of air pollution are appearing with increasing frequency and severity in metropolitan areas throughout

⁸⁰ 111 CONG. REC. 2356 (1965) (statement of Sen. Muskie). For a discussion of Senator Muskie's involvement during his first term in legislating on water pollution issues, see Blomquist, *Dawn, supra* note 3, at 540-48, 551-78.

⁸¹ See supra notes 44-75 and accompanying text.

⁸² Radio Interview by WGAN with Sen. Edmund S. Muskie, Washington, D.C. (Jan. 20, 1965) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 245-6).

⁸³ *Id.* Muskie went on to note: "In addition, my air pollution measures provide funds for accelerated research and the establishment of a Federal Air Pollution Control Laboratory." *Id.*

⁸⁴ *Id.* Interestingly, President Johnson's HEW Secretary, Anthony J. Celebrezze, had submitted a report to Congress on the "automotive air pollution" problem on January 15, 1965, pursuant to the Clean Air Act of 1963, that was not as optimistic as Senator Muskie's technological assessment. *See* SECRETARY OF HEALTH, EDUCATION, AND WELFARE, AUTOMOTIVE AIR POLLUTION, S. DOC. NO. 89-7 (1965). According to the report's summary:

Commenting about water pollution legislation during his January 1965 radio interview, Senator Muskie discussed his proposals for increased funding, research and development of water pollution abatement technologies, while explaining the benefit of the proposed legislation for Maine shell fishermen.⁸⁵ Surprisingly, early in the new session of Congress, on January 28, 1965, a week after his radio talk and a week before President Johnson's message,⁸⁶ the Senate passed Muskie's water pollution bill, Senate Bill 4.⁸⁷ Muskie's Subcommittee had held a one-day hearing on the bill on January 18, 1965—ten days prior to its passage by the Senate.⁸⁸ In 1964,

the United States. Biological studies of animals show that the photochemical reaction products of automotive emissions produce adverse health effects. There is substantial evidence that these effects may appear in humans after extended exposure Laboratory experiments have demonstrated that reductions of atmospheric hydrocarbons, an important emission from motor vehicles, can reduce photochemical air pollution . . . Other automobile emission[s] such as nitrogen oxides and carbon monoxide have also been determined as significant. . . . Technical procedures for reducing these emissions are not so clearly established as for hydrocarbons. Carbon monoxide, although not a contributor to atmospheric photochemical reactions, is a directly toxic substance. Technical procedures have been developed with [sic] substantially reduce emissions of this pollutant.

Considering the present extent of the automotive air pollution problem and the speed at which it is growing, effective control of these emissions is needed now. The elimination of all automotive effluents [that] might be considered noxious or a nuisance would be desirable. However, technology thus far has not advanced sufficiently to permit the complete control of all sources of automotive emissions.

Id. at 2 (emphasis added).

The bill which I am introducing is co-sponsored by 25 of my colleagues, including all members of our Subcommittee on Air and Water Pollution. It is a bipartisan measure directed toward improving the quality of our water resources and making more effective our programs for the control and abatement of water pollution.

⁸⁵ Radio Interview with Sen. Edmund S. Muskie, *supra* note 82.

⁸⁶ See supra notes 44-75 and accompanying text.

⁸⁷ 111 CONG. REC. 1545 (1965). In his remarks on the floor of the Senate, in introducing this bill, Muskie stated:

¹¹¹ CONG. REC. 187 (1965) (statement of Sen. Muskie).

⁸⁸ Water Quality Act of 1965: Hearing on S. 4 Before the Senate Special Subcomm. on Air and Water Pollution Comm. on Public Works, 89th Cong. 6 (1965) [hereinafter Hearing on S. 4]. In a letter from Majority Leader Mike Mansfield to Muskie before the Senate vote on

Muskie's Subcommittee had amassed a substantial hearing record on water pollution problems and proposed legislation, consisting of "more than 1,000 pages of testimony and exhibits." In the new Eighty-Ninth Congress, Muskie introduced Senate Bill 4, which largely incorporated by reference his previous water pollution bill, which had passed the Senate during the Eight-Eighth Congress but had not been voted upon by the House of Representatives. 90

In order to better understand Senator Muskie's legislative perspective on the nation's environmental problems in January of 1965, it is appropriate to pause and briefly describe the frenetic policy activities Muskie's Subcommittee on Air and Water Pollution had undertaken since its creation in April 1963. As described in Senate Public Works Committee Chairman Pat McNamara's foreword to a published staff report entitled, *Summary of Legislative*

Senate Bill 4, Mansfield wrote: "It is my understanding that you have finished subcommittee hearings on the Water Pollution measure (S.4). Needless to say, I am delighted at the prompt manner in which this has been handled." Letter from Sen. Mike Mansfield, to Sen. Edmund S. Muskie (Jan. 21, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 829-2). Mansfield went on to write:

If you could move on with the [subcommittee] report, Pat McNamara [Chairman of the Senate Public Works Committee] is prepared to bring it out of the committee very quickly and we should be able to act in a similar fashion on the floor. I know that the President would be very grateful if this could be done.

Id

In October of 1963, the Committee on Public Works favorably reported S. 649, the Federal Water Pollution Control Act Amendments of 1963. Prior to this action, the Subcommittee on Air and Water Pollution held public hearings for a period of 6 days, at which time officials of the [HEW],...local governments, interstate water pollution control agencies, conservation organizations, the public health and medical profession, and industry testified and presented their views.

S. 649 passed the Senate 69 to 11 but failed to become law in the 88th Congress, when the House, after reporting an amended version from committee, had insufficient time in the closing days of the session to act.

STAFF OF SENATE COMM. ON PUBLIC WORKS, 88TH CONG., SUMMARY OF LEGISLATIVE ACTIVITIES 22 (Comm. Print 1964).

⁸⁹ Hearing on S. 4, supra note 88, at 6 (statement of Sen. Muskie).

⁹⁰ *Id.* (statement of Sen. Muskie referring to S. 649 having been passed by the Senate during the previous 88th Congress). According to a summary of legislative activities of the Senate Public Works Committee during the 88th Congress:

⁹¹ For the details of the lawmaking activities of the new Subcommittee during 1963-64, see Blomquist, *Dawn*, *supra* note 3, at 548-611.

Activities during 1963-64, 92 "the Senate Committee on Public Works found an increasing amount of its activity shifting from the consideration of traditional [public works] project[s] legislation to [more] substantive matters." Air and water pollution policy was highlighted by Senator McNamara as one of three key "substantive matters" addressed by his Public Works Committee during 1963-64. 94

Regarding air pollution, the staff summary described the 1963 hearings held by Muskie's Subcommittee which culminated in the passage of the Clean Air Act of 1963. Moreover, the staff summary discussed the 1964 air pollution field hearings held by Senator Muskie's Subcommittee in Los Angeles, Chicago, Boston, New York, Tampa, and Washington, D.C.; the staff summary also reviewed the Muskie Subcommittee's October 1964 report, *Steps Toward Clean Air*, and the voluminous Subcommittee hearing record which preceded that document. Regarding water pollution, the 1965 staff summary described the preparation of a 1963 staff study on water pol-

In the control of air pollution, as indeed in most areas of human endeavor where social and technological problems merge, society is faced with the sometimes difficult task of balancing the rewards of progress with its penalties. The great industrial expansion of the last century has been achieved not without its price, and the unwanted and sometimes devastating effects of air pollution are a part of that price.

⁹² STAFF OF SENATE COMM. ON PUBLIC WORKS, supra note 90, at v.

⁹³ Id.

⁹⁴ *Id.* The other two new substantive concerns which captured the attention of the Senate Public Works Committee during 1963-64 were described by Chairman McNamara as "public works programs designed to aid economic development" and the "total community value" of the national highway program. *Id.*

⁹⁵ *Id.* at 22. Discussion also referred to a September 1963 staff report, ordered by Muskie, which "documented the magnitude of the national air pollution problem" *Id.* at 26.

⁹⁶ STAFF OF SENATE COMM. ON PUBLIC WORKS, *supra* note 90, at 24.

⁹⁷ *Id.* at 25 (citing STAFF OF SPECIAL SENATE SUBCOMM. ON AIR AND WATER POLLUTION, COMM. ON PUBLIC WORKS, 88TH CONG., STEPS TOWARD CLEAN AIR (Comm. Print 1964)). According to the report:

Id. at 4 (emphasis added).

⁹⁸ STAFF OF SENATE COMM. ON PUBLIC WORKS, *supra* note 90, at 25. According to the staff summary, an October 1964 staff report on clean air had recommended consideration, among other legislative provisions of the following: national legislation providing for minimum national automobile exhaust emissions standards; diesel-powered vehicle exhaust emission criteria; the establishment of a federal laboratory to study air pollution; administrative development of uniform state laws on air pollution control. *Id.*

lution, prepared at the behest of Chairman Muskie, ⁹⁹ and the production under the guidance of Muskie's Subcommittee of a documentary film entitled *Troubled Waters*. ¹⁰⁰

In light of his hard policy work over the previous two years as subcommittee chairman, ¹⁰¹ Senator Muskie was understandably proud in describing his rapid legislative success in helping to pass Senate Bill 4, the Water Quality Act of 1965, during the first month of the 89th Congress. ¹⁰² In his February 1965 newsletter to his Maine constituents, Muskie crowed: "I am happy to report that my water pollution abatement bill has become the first piece of Great Society legislation to be adopted by the Senate." ¹⁰³ Explaining the Senate water pollution bill in local terms, Muskie recalled his days as Maine's governor in the late 1950s:

The bill . . . can be very helpful to Maine's efforts to rid its waters of pollution, as well as to all other states and cities with water pollution problems. I read recently that the Maine Water Improvement Commission reported that Maine communities have completed roughly two-fifths of the total number of projects necessary to bring water pollution to a tolerable level. This represents a fine start in the decade since [1955 when] I was governor and initiated Maine's present pollution abatement program by establishing state matching funds for cities and towns to build treatment facilities. However, the Commission's report indicates that our worst examples of water pollution, such as the Penobscot, Androscoggin and Presumpscot Rivers, still persist. It is my fondest hope in the field of Maine conservation that my bill will enable state and local leaders to speed up Maine's pollution abatement program. 104

⁹⁹ *Id.* at 28-30.

 $^{^{100}}$ *Id.* at 30. "This film . . . was a 30-minute sound color film narrated by Henry Fonda. The script and shooting schedule[] was developed and supervised by the committee staff." *Id.*

¹⁰¹ See supra notes 91-100 and accompanying text.

¹⁰² See supra notes 87-90 and accompanying text.

¹⁰³ Press Release, Sen. Edmund S. Muskie, Report to Maine (Feb. 3, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 829-2).

¹⁰⁴ *Id.* For the environmental accomplishments of Governor Muskie, see Blomquist, *What is Past is Prologue, supra* note 3.

During the remainder of February 1965, Senator Muskie led the Subcommittee on Air and Water Pollution in holding hearings on legislation that would require agencies of the federal government to do a better job of controlling air and water pollution from federal installations. ¹⁰⁵ In March, Muskie issued a report recommending Senate passage of Senate Bill 560, the Federal Installations, Facilities and Equipment Control Act. ¹⁰⁶ According to the Subcommittee Report: "The testimony received demonstrated that the problem of water and air pollution from Federal facilities and federally owned and operated motor vehicles contributes to the national problem and that current efforts are not adequate to cope with the existing problem, much less keep abreast of the improvements needed." ¹⁰⁷

In April, the national problem of air pollution hit the front page of the *New York Times*. The *Times* article provided an interesting chronology of public pressure on the auto industry to reduce exhaust emissions in cars, which began with California's efforts in establishing a state motor vehicle control board in 1960. The meat of the article was a discussion of the mention in President Johnson's February *Message on Natural Beauty* of the need for better pollution controls on automobiles and Muskie's legislative activities since January 1965 that focused on the problem of auto exhausts. Follow-up articles in the *Times*, on April 8th¹¹¹ and 9th¹¹² provided detailed coverage of Muskie's pending subcommittee hearings on air pollution and the Johnson Administration's response to the hearings. Of particular interest was an editorial in the April 8th issue of *The New York Times* entitled "Political Smog" which criticized the Administration's wavering on the immediate need for mandatory national automobile exhaust controls, opining that,

¹⁰⁵ See Federal Installations, Facilities, and Equipment Pollution Control Act: Hearings on S.560 before the Senate Special Subcomm. on Air and Water Pollution of the Comm. on Public Works, 89th Cong. (1965).

¹⁰⁶ S. Rep. No. 89-128 (1965).

 $^{^{107}}$ *Id.* at 3.

¹⁰⁸ David R. Jones, *The Car and Smog: A Growing Controversy*, N.Y. TIMES, Apr. 5, 1965, at 1.

¹⁰⁹ *Id.* at 27.

¹¹⁰ See id

¹¹¹ David R. Jones, Auto Men Testify on Smog Devices, N.Y. TIMES, Apr. 8, 1965, at 34.

¹¹² Cabell Phillips, *Administration Eases Its Stand on the Control of Air Pollution*, N.Y. TIMES, Apr. 9, 1965, at 38.

¹¹³ Editorial, *Political Smog.* N.Y. TIMES, Apr. 8, 1965, at 38.

"Senator Edmund S. Muskie of Maine was surely right when he [said] . . . that it is futile to rely upon voluntary action by [the auto] industry, since the manufacturers never take any action unless they feel the pressure of public concern." The *Times* editorial ended with the following provocative observation: "President Johnson values his good relations with the leaders of the automobile industry. But ordinary citizens value their air and their health." A specialized policy newsletter, *Health Bulletin*, provided an inside political perspective on President Johnson's April retreat from vigorous control of automotive exhaust: 116

President Johnson's plans for clean air in the Great Society bogged down this week as the Administration faltered in trying to establish a coherent point of view on Sen. Edmund S. Muskie's... bill that would require car makers to meet California's smog control standards for cars sold throughout the nation. The word that it is not government policy to ask for legislation on auto air pollution at this time was passed to the Senate Public Works Committee by James M. Quigley, Assistant Secretary of Health, Education and Welfare.

[The] [r]eal reason for the apparent crossed signals on this important subject could well be Presidential preoccupation with the Vietnam and Selma [Alabama civil rights] crises. Senator Muskie, chairman of the Public Works Subcommittee on Air and Water Pollution, had been led to believe the Administration didn't think his air pollution control bill was strong enough. Remember the President's message on beauty and its plea for fresh air to breathe? In December [1964], [HEW Secretary] Anthony Celebrezze told Congress the automotive pollution problem was growing so fast effective controls are needed now. But HEW's witness this week found fault with most parts of Muskie's pollution abatement bill. Quigley's main suggestion was that California's law be studied to see how it works out there first. If

¹¹⁴ *Id*.

¹¹⁵ Id

¹¹⁶ Administration Slows Support of Air Pollution Bill, HEALTH BULLETIN, Apr. 10, 1965 (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 570-9).

results are good on government cars trying smog control devices, the industry may voluntarily put the devices on all new models, he hoped.

Observers sensed that the Administration had yielded to automobile industry pressure. . . . President Johnson said he would meet with automotive industry leaders and discuss voluntarily compliance. Mr. Johnson contemplated inviting presidents of the big three [Ford, GM, and Chrysler] to Washington where they could break bread, have a drink and he could use the famous old LBJ reasoning. But the Selma and Vietnam crises . . . kept him from carrying out his plans. Meanwhile Muskie went ahead with his hearings and the Administration's witness showed up without a mandate to support legislation on something the President still thinks he can get without the pressure of law.

The other [political explanation] is that Henry Ford was a key factor in swinging many large industrialists to the Johnson ticket last year [in 1964]. Ford may have asked Mr. Johnson to get Muskie off the automobile industry's back. Johnson, some insiders say, could have agreed to withdraw support for Muskie's bill to placate Ford, knowing the bill probably will pass anyway in this Congress.

The [Muskie] bill would require 1967 models to have pollution control systems for auto exhausts and engine breather openings. Both modifications together would cut unburned hydrocarbon wastes by 70 to 80 per cent. Probably \$25 million would be provided for state inspection programs to make sure the devices are kept in working order.¹¹⁷

By the end of April, however, President Johnson had "[r]etreat[ed]" on his opposition to Muskie's air pollution bill provisions on mandatory exhaust controls for cars. An article in the magazine *Science*—dubbing

¹¹⁷ *Id.; see also* Letter from Anthony Celebreeze, HEW Secretary, to Sen. Pat McNamara, Chairman, Senate Comm. on Public Works (Apr. 5, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 570-6) (supporting Muskie's auto pollution provisions).

Elinor Langer, *Pollution Politics: LBJ Retreats on Opposition to Measure Curbing Pollution From Automobile Exhaust*, SCIENCE, Apr. 30, 1965, at 611, 611 (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 570-9).

Muskie as "one of the most knowledgeable and effective conservationists in the Senate" detailed the then two-year history of Muskie's Subcommittee efforts to understand and legislate for clean air, and offered speculation as to why the Johnson Administration fumbled HEW testimony before Muskie's Subcommittee. Subcommittee.

Muskie was pleased when the Senate Public Works Committee issued a favorable report on Senate Bill 306, the Clean Air Act Amendments and Solid Waste Disposal Act of 1965 on May 14th. ¹²² Pertinent provisions of the Public Works Committee report ¹²³ recited the legislative clean air activities of Muskie's Subcommittee on Air and Water Pollution from 1963 through 1965, ¹²⁴ and provided the following analysis of the national need to control automotive exhaust:

The committee believes that this legislation is essential if we are to successfully combat the air pollution problems present at this time and those which inevitably will occur unless early corrective action is taken. Automotive exhausts are not the only source of air pollution, but they are a major problem and they are increasing rapidly.

The committee has determined from the automotive industry's own testimony that it can meet the California

When [Muskie's subcommittee] was created [in April 1963], Congress was on the verge of authorizing a major extension of federal air pollution programs, giving the Secretary of HEW power to initiate abatement actions and sanctioning federal grants to state, regional, and municipal governments to stimulate abatement measures on a local level. The initial efforts of the new subcommittee were directed toward passage of the bill, which was passed as the Clean Air Act in December 1963. When that had been accomplished, however, the subcommittee began more detailed studies of air pollution, holding hearings [throughout the country].

¹¹⁹ *Id.* Muskie's office promptly issued a press release parroting the *Pollution Politics* article. *See* Press Release, Office of Sen. Edmund S. Muskie (May 4, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 570-6).

¹²⁰ Langer, *supra* note 111, at 611. According to the article:

Id.

¹²¹ *Id.* at 612-13.

¹²² Press Release, Office of Sen. Edmund S. Muskie (May 14, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 570-9).

¹²³ S. Rep. No. 89-192 (1965).

¹²⁴ *Id.* at 3.

standards of 275 parts per million of hydrocarbons and not more than 1.5 percent by volume of carbon monoxide and does intend to meet them. The committee believes that these standards can be applied and are reasonable. By applying them, the Nation will take a major step toward the control and abatement of air pollution.

The committee believes that exact standards need not be written legislatively but that the Secretary should adjust to changing technology.

The committee believes that the indicated costs of automotive emission control equipment are modest and commensurate with the need to reduce this major source of air pollution. . . .

The committee also believes that the manner of meeting the standards, whether by engine modification or by attaching a device, should be left to the manufacturer's determination.¹²⁵

On May 18, 1965, four days after the issuance of the aforementioned favorable Public Works Committee Report, ¹²⁶ Muskie's bill, Senate Bill 306, the Clean Air Act of 1965, passed the Senate by voice vote. ¹²⁷ Prior to the Senate vote, Senator Muskie spoke to his colleagues on the floor, noting:

The effectiveness of this [automotive exhaust] program will depend in large part on proper maintenance of motor vehicle engines equipped or modified to reduce harmful exhaust emissions. The major obstacle to inspection is the lack of a simple exhaust emission testing system adaptable to large scale inspections. The Department of Health, Education, and Welfare should carry forward activities to help develop means of assisting States in testing motor vehicle emissions. . . .

It is also evident to the committee that further research is needed to determine effects of automotive pollutants other than hydrocarbons and carbon monoxide and to find means of controlling them and to advance the research activities relating to reducing the emissions of oxides of sulphur produced by the combustion of sulphur-containing fuels.

Id. at 4.

¹²⁵ *Id.* at 3-4. The Senate Report also made the following important statements:

¹²⁶ See supra notes 122-25 and accompanying text.

¹²⁷ 111 CONG. REC. 10.779-83 (1965).

I want to emphasize the importance of the automotive pollution exhaust control provisions of the bill. In all our hearings and investigations of this problem we have been confronted by the fact that 50 percent of our national air pollution problem is attributable to the 84 million automobiles, trucks, and buses on our highways. Each day these vehicles discharge into the air an estimated 250,000 tons of carbon monoxide, 16,500 to 33,000 tons of hydrocarbons and 4,000 to 12,000 tons of nitrogen oxides. We cannot afford to allow this rate of pollution to continue.

There is a demonstrated need for nationwide controls on exhaust emissions. The automotive industry has advised us that they can meet the California standards for nationwide distribution by the fall of 1967 and that the cost of the necessary engine and exhaust system modifications is modest. ¹²⁸

Moreover, Muskie's floor statement highlighted the research and development program included in the Clean Air Act of 1965 to "find economic and effective ways of dealing with" the daily disposal of "520 million pounds of refuse." 129

The House of Representatives followed the Senate's lead on air pollution legislation. On August 31, 1965, the House Committee on Interstate and Foreign Commerce issued a favorable report on Senate Bill 306. 130 Among the most important statements in the House report was commentary on motor vehicle exhaust. The House report contended that "motor vehicle exhaust control standards on a national scale are necessary and would be of benefit to the entire country." 131

Arguing in favor of a national approach to automotive air pollution, the House report observed that "[t]he high rate of mobility of automobiles suggests that anything short of nationwide control would scarcely be adequate

¹²⁸ *Id.* at 10,783.

¹²⁹ Id

¹³⁰ H.R. REP. No. 89-899 (1965).

¹³¹ *Id.* at 5.

to cope with the motor vehicle pollution problem." Shortly after the House issued its report, the House of Representatives passed Senate Bill 306, essentially the same version as Muskie's original bill. On October 1, Senator Muskie asked his colleagues to accept the House's version and the Senate acceded to his request by voice vote. On October 20, President Johnson signed the legislation into law as the Clean Air and Solid Waste Disposal Act of 1965, noting at the signing ceremony that air pollution has become a health problem that is national in scope and was also a drain on [America's] resources. . . . account[ing] for more than \$11 billion in economic damages per year. President Johnson observed that the Clean Air and Solid Waste Disposal Act of 1965 would require all 1968 model automobiles, both domestic and foreign, to meet federal control standards for exhaust.

In the area of water pollution, Muskie hosted a meeting of the President's Water Pollution Control Advisory Board in Portland, Maine in late June. During its meeting, the Board paid tribute to Senator Muskie for "his outstanding and singularly effective sponsorship, authorship, and engineering through the United States Senate of legislation affecting not only water pollution control but air pollution and solid wastes disposal as well." Muskie expressed his concern to the Board about serious water pollution

¹³² Id

¹³³ Press Release, Office of Sen. Edmund S. Muskie (Oct. 1, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 570-6).

¹³⁴ 111 CONG. REC. 25,850-51 (1965) (statement of Sen. Muskie).

¹³⁵ Solid Waste Disposal Act of 1965, Pub. L. No. 89-272, 79 Stat. 997 (1965), *repealed by* Resource Conservation and Recovery Act of 1976, Pub. L. No. 94-580, 90 Stat. 2795 (1976). ¹³⁶ Press Release, Office of Sen. Edmund S. Muskie (Oct. 20, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 570-8).

¹³⁷ President Johnson also quoted Rachel Carson in his remarks: "In biological history, no organism has survived long if its environment became in some way unfit for it. But no organism before man has deliberately polluted its own environment." Remarks in the Hospital at the Signing of the Clean Air Act Amendments and Solid Waste Disposal Bill, [1965] 2 Pub. Papers 1066, 1067 (Oct. 20, 1965) (quoting RACHEL CARSON, SILENT SPRING (1962)).

¹³⁸ Letter from Robert C. Ayers, Executive Secretary, Water Pollution Control Advisory Board, to John W. Gardner, Secretary, Dep't of Health, Education, and Welfare (Aug. 31, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 576-2).

¹³⁹ *Id.* at 3.

problems along coastal Maine that "represents the accumulation of conditions over more than a century"¹⁴⁰ On September 21, he urged the Senate to adopt a conference report on Senate Bill 4, which advocated various amendments to the Water Pollution Control Act. ¹⁴¹ Muskie remarked that "it was not easy to obtain agreement on this legislation" because "there were strong opinions" among House conferees and Senate conferees regarding the appropriate level to be set for national water quality standards. ¹⁴² On October 2nd, President Johnson signed the Water Quality Act of 1965 into law. ¹⁴³ Waxing philosophical at the White House signing ceremony, President Johnson opined that "[n]o one has a right to use America's rivers and . . . waterways that belong to all the people as a sewer." ¹⁴⁴ He went on to state:

The banks of a river may belong to one man or even one industry or one state, but the waters which flow between those banks should belong to all the people.

There is no excuse for a river flowing red with blood from slaughterhouses. There is no excuse for paper mills pouring tons of sulphuric acid into the lakes and the streams of the people of this country. There is no excuse—and we should call a spade a spade—for chemical companies and oil refineries using our major rivers as pipelines for toxic wastes. There is no excuse for communities to use other peoples' rivers as a dump for their raw sewage.

This sort of carelessness and selfishness simply ought to be stopped; and more, it just must be reversed. And we are going to reverse it.

We are going to begin right here in Washington with the Potomac River. Two hundred years ago, George Washington used to stand on his lawn down here at Mount Vernon and look on a river that was clean and sweet and pure. In our own century, President Theodore Roosevelt used to go swimming in the Potomac. But today the Potomac is a river of decaying

¹⁴⁰ *Id*. at 10.

¹⁴¹ 111 CONG. REC. 24,560-62 (1965) (statement of Sen. Muskie).

¹⁴² *Id.* at 24,560.

¹⁴³ Remarks at the Signing of the Water Quality Act of 1965, [1965] 2 PUB. PAPERS 1034, 1035 (Oct. 2, 1965).

¹⁴⁴ *Id.* at 1034.

sewage and rotten algae. Today all the swimmers are gone; they have been driven from its banks.

Well, with the signing of the Water Quality Act of 1965 ... I pledge [to] you that we are going to reopen the Potomac for swimming by 1975. And within the next 25 years, we are going to repeat this effort in lakes and streams and other rivers across this country.

I believe that with your help and your continued cooperation, water pollution is doomed in this century. 145

In a radio broadcast, shortly before President Johnson's signing of the Water Quality Act of 1965, Senator Muskie observed that "[t]he President's signature caps almost three years of work" by Muskie and his Subcommittee on Air and Water Pollution "to achieve the key measures of the [legislation]." Muskie asserted, however, that "more work will be necessary in future years" by Congress and the executive branch to assure adequate water quality for the country. According to Muskie, "[i]t is apparent," as of 1965, "that a greater federal participation will be necessary if the cities of our nation are to be able to afford the task of abating pollution." before the country.

With air and water pollution legislation being regarded as a priority, ¹⁴⁹ the remaining months of 1965 saw Senator Muskie involved in advocacy for better air and water pollution control in the United States. To illustrate, in

¹⁴⁵ Id. at 1034-35.

Radio Broadcast by Sen. Edmund S. Muskie (Sept. 30, 1965) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 241-1).
 Id.

¹⁴⁸ *Id.*; see also Morton Mintz, Air Pollution Curb Viewed as Merely Delaying Disaster: Supply Limited, WASH. POST, Sept. 26, 1965 at A2 (quoting Senator Muskie as saying, "The question in [sic] not: should we control [air] pollution? . . . The question is: How? and how fast? . . . Can we control it before it destroys us?"). At this September 1965 meeting, Muskie also noted that lead air emissions from automobiles was a matter of "grave concern." Lead's Role in Pollution will be Probed, OIL & GAS J., Sept. 27, 1965, at 58, 58. Indeed, Muskie asserted: "We cannot tolerate delay in acting on matters affecting the health of our citizens—especially when they relate to the adverse effects of long-term dosages of toxic materials." *Id.*

¹⁴⁹ See generally SECRETARY OF INTERIOR ET AL., A REPORT ON NATURAL BEAUTY TO THE PRESIDENT (Oct. 1, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 519-5) (discussing, among other topics, the high priority being given

October, Senator Muskie's interview remarks on pollution control were published in the *General Electric Forum*;¹⁵⁰ in November, Muskie authored articles on water pollution control policy for *Science & Mechanics*¹⁵¹ and *The Book of Knowledge*,¹⁵² while also being featured in articles on national pollution abatement policy in *Fortune*,¹⁵³ *Chemical and Engineering News*,¹⁵⁴ and *Nation's Cities*.¹⁵⁵ Also in November, President Johnson thanked Senator Muskie for his help "in developing an executive order to control water pollution from federal installations;"¹⁵⁶ in December, Muskie authored an article for the trial lawyer's magazine, *Trial*, on air pollution.¹⁵⁷

by Executive Agencies to waterway cleanup programs, water pollution control, and solid waste control); Press Release, Office of the White House Press Secretary, Restoring the Quality of Our Environment (Nov. 5, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 570-8) (announcing the receipt by President Johnson of a report from his Science Advisory Committee on environmental quality that found, among other things, that "[i]f we are to manage our pollution as we should, we must give more nearly the same attention to how we dispose of our waste materials as to how we gather together and transform our raw materials," while also suggesting to the President that "we must give much more attention to the side effects on the living world of all that we do," and observing that "[p]ollution is not a single simple problem; rather it is a compound of thousands of problems about which we know too little to plan and act as adequately as we should"); Press Release, Office of the White House Press Secretary, Executive Order: Prevention, Control, and Abatement of Water Pollution by Federal Activities (Nov. 17, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 580-1).

- ¹⁵⁰ This Must be a Citizen Action Program: An Interview With Senator Edmund S. Muskie, 8 GEN. ELECTRIC F. 4, 15 (1965) ("Not too many years ago, the demand of conservationists for water pollution abatement was greeted with the remark: 'What do you want, payrolls or pickerel?' The answer, of course, was and is: 'Both.'").
- ¹⁵¹ EDMUND S. MUSKIE, We Can Have Lots of Water!, SCI. & MECHANICS, Nov. 1965, at 55. ¹⁵² Edmund S. Muskie, *The Water-Pollution Menace*, in BOOK OF KNOWLEDGE ANNUAL 344 (The Grolier Soc'y 1966).
- ¹⁵³ Press Release, Office of Sen. Edmund S. Muskie (Nov. 2, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 572-6).
- ¹⁵⁴ Press Release, Office of Sen. Edmund S. Muskie (Nov. 8, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 572-6).
- ¹⁵⁵ Donald A. Slater, *The Search For Water Quality*, NATION'S CITIES, Nov. 1965, at 12.
- ¹⁵⁶ Press Release from Office of Sen. Edmund S. Muskie (Nov. 17, 1965) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 580-1).
- ¹⁵⁷ Edmund S. Muskie, Article on Air Pollution for TRIAL MAGAZINE (Dec. 10, 1965) (unpublished manuscript, on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 241-4) (ending the article with a comment: "As I have said, air

B. Maintaining Momentum, 1966

1. President Johnson's Message on Preserving Our Natural Heritage

Repeating his practice of sending special messages to Congress on environmental and conservation issues, ¹⁵⁸ in February of 1966 President Johnson issued a message to Congress entitled *Preserving Our Natural Heritage*. ¹⁵⁹ To begin, President Johnson quoted Albert Schweitzer: "Man has lost the capacity to foresee and to forestall. He will end by destroying the earth." ¹⁶⁰ President Johnson then wryly observed: "The most affluent nation on earth may feel that it is immune from this indictment. A nation that offered its people—a century ago—uncharted forests, broad sparkling rivers, and prairies ripe for planting, may have expected that bounty to endure forever." ¹⁶¹ Johnson continued the introductory portion of his message with references to history and economics:

But we do not live alone with wishful expectations.

We live with history. It tells us of a hundred proud civilizations that have decayed through careless neglect of the nature that fed them.

We live with the certain future of multiplying populations, whose demands on the resources of nature will equal their numbers.

We are not immune. We are not endowed—any more than were those perished nations of the past—with a limitless natural bounty.

Yet we are endowed with their experience. We are able to see the magnitude of the choice before us, and its consequences for every child born on our continent from this day forward.

Economists estimate that this generation has already suffered losses from pollution that run into billions of dollars

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pollution control is expensive. But we must afford it").

¹⁵⁸ See supra notes 44-75 and accompanying text.

¹⁵⁹ Special Message to the Congress Proposing Measure to Preserve America's Natural Heritage [1966] 1 Pub. Papers 195 (Feb. 23, 1966). ¹⁶⁰ *Id.* at 195.

¹⁶¹ *Id*.

each year. But the ultimate cost of pollution is incalculable.

We see that we can corrupt and destroy our lands, our rivers, our forests, and the atmosphere itself—all in the name of progress and necessity. Such a course leads to a barren America, bereft of its beauty, and shorn of its sustenance.

We see that there is another course—more expensive today, more demanding. Down this course lies a natural America restored to her people. The promise is clear rivers, tall forests, and clean air—a sane environment for man.¹⁶²

President Johnson then focused on specifics. At the outset, he provided several comments on what he termed "The Pollution of Our Waters." Initially, he referenced a November 1965 quotation from a report of the Environmental Pollution Panel of the President's Science Advisory Committee: "Pollution touches us all. We are at the same time pollutors and sufferers from pollution. Today, we are certain that pollution adversely affects the quality of our lives. In the future, it may affect their duration." Using this report as a rhetorical segue, 165 Johnson described in detail the deplorable state of water quality in America, noting:

At that time [November 1965—about four months earlier], every river system in America suffered some degree of pollution.

At that time, discharges into our rivers and streams—both treated and untreated—equaled the raw sewage from almost 50 million people. Animal wastes and waste from our cities and towns were making water unfit for any use.

At that time, rivers, lakes, and estuaries were receiving great quantities of industrial chemicals—acids from mine runoff—detergents and minerals that would not "break down"

¹⁶² *Id*.

¹⁶³ *Id*.

¹⁶⁴ *Id.* (quoting the Environmental Pollution Panel of the President's Science Advisory Committee).

¹⁶⁵ For a discussion of the importance of well-crafted rhetoric in public affairs, see Robert F. Blomquist, *The Trial of President William Jefferson Clinton: "Impartial Justice," the Court of Impeachment and Ranked Vignettes of Praiseworthy Senatorial Rhetoric*, 84 MARQ. L. REV. 383 (2000).

in the ordinary life of the water. These pollutants were reentering domestic and industrial water supplies. They were killing fish. They posed hazards to both human and animal life.

By that time, on Lake Erie 6 of 32 public recreation and swimming areas had been closed down because the water was unsafe for human beings. The blue pike catch in the lake had fallen from 20 million pounds in 1937 to 7,000 pounds in 1960. The oxygen that fish need for life was being rapidly devoured by blooms of algae fed by pollutants.

At that time, in the lower Arkansas Red River Basin, oil field development and irrigation were dumping salt into rivers. The result was an additional annual expense of \$13 million to bring in fresh water.

I have placed these comments in the past tense not because they are no longer true. They are more tragically true today than they were 4 months ago.

I seek instead to make them a benchmark in restoring America's precious heritage to her people.

I seek to make them that point in time when Americans determined to resist the flow of poison in their rivers and streams.

I seek to make them ancient history for the next generation.

And I believe the conditions they describe can become just that—if we begin now, together, to cleanse our rivers of the blight that burdens them. 166

Citing the 1965 passage of national water pollution control legislation, ¹⁶⁷ President Johnson proposed two new national water quality initiatives in his February 1966 message: a "Clean Rivers Demonstration Program" and the

¹⁶⁶ Special Message to the Congress Proposing Measure to Preserve America's Natural Heritage, [1966] 1 Pub. Papers at 196.

¹⁶⁷ *Id.*; see supra notes 134-41 and accompanying text (discussing passage of the 1965 water pollution legislation).

¹⁶⁸ Special Message to the Congress Proposing Measures to Preserve America's Natural Heritage, [1966] 1 Pub. Papers at 196-97.

establishment of a "National Water Commission."¹⁶⁹ Regarding the former proposal, President Johnson asserted that the nation should "begin now to clean and preserve entire river basins from their sources to their mouths."¹⁷⁰

¹⁶⁹ *Id.* at 200. According to President Johnson:

In no area of resource management are the problems more complex—or more important—than those involving our Nation's water supplies. The water shortage in the Northeastern United States is a dramatic reminder that we must take every possible step to improve the management of our precious water resources.

I propose the establishment of a National Water Commission to review and advise on the entire range of water resource problems—from methods to conserve and augment existing water supplies to the application of modern technology, such as desalting, to provide more usable water for our cities, our industries, and our farms.

This Commission will be composed of the very best minds in the country. It will judge the quality of our present efforts. It will recommend long-range plans for the future. It will point the way to increased and more effective water resource measures by the Federal Government, working in close cooperation with states, local communities, and private industry.

Id. at 200-01.

¹⁷⁰ *Id.* at 196 (emphasis omitted). Johnson went on to state: "I propose a new kind of partnership—built upon our creative federal system—that will unite all the pollution control activities in a single river basin. Its task is to achieve high standards of water quality throughout the basin." *Id.* at 196-97.

The national press amplified President Johnson's water pollution initiatives with major news articles. See, e.g., President Considering Huge War on Pollution, WASH. STAR, Feb. 14, 1966 ("[a]n attack on water pollution costing more than the \$45 billion interstate highway program is expected to be proposed to Congress in the near future by President Johnson;" "President Johnson has reportedly taken a keen personal interest in the proposals, which have been kept a close secret."); William M. Blair, Johnson to Offer New Bill to Curb River Pollution, N.Y. TIMES, Feb. 13, 1966, at 1 ("While the anti-pollution program will be a major item in a special conservation measure the President will send to Congress next week, it will range over a broader field to include the needs for recreation and beautification of the countryside."); Gladwin Hill, The Clean Water Fight: President Casts Himself as Referee, Wielding a Big Carrot and a Big Stick, N.Y. TIMES, Feb. 25, 1966, at 19.

For generations the American public has been engaged in a great wrestling match with itself—on the one hand polluting the nation's waterways to a sickening extent, on the other hand deploring the results. Pressures for reform have regularly been countered by the inertia of those with vested interests in pollution, ranging from the myriad stockholders in filth-producing industries to citizens who balk at paying taxes for adequate sewage treatment facilities. President Johnson has now cast himself in the role of the Big Referee to break up this schizophrenic struggle.

President Johnson's clean rivers demonstration program consisted of four elements: adoption of "[a]ppropriate water quality standards" throughout a river basin; adoption by state and local governments of suitable long range plans to achieve basin water quality standards; the formation of permanent river basin organizations throughout the country to implement plans; and state and local user charges to help construct publically-owned treatment facilities.¹⁷¹

Moreover, President Johnson told Congress that, in his view, the Department of the Interior should be the one federal agency to "assume leadership in our clean water effort." Accordingly, he announced that he would "shortly submit to the Congress a reorganization plan to transfer to the Department of the Interior the Water Pollution Control Administration [from] . . . the Department of Health, Education, and Welfare." ¹⁷³

President Johnson articulated the rationale for water pollution planning on a river basin-wide level as follows:

Broad-scale planning of water standards in broad stretches of a river can achieve substantial economies. More efficient plants can be built to treat the wastes of several communities and nearby industries. Integrating the control of stream flow and treatment plant operation can reduce costs—for example, by fitting the type and amount of day-to-day treatment to varying stream conditions. ¹⁷⁴

To reinforce the river basin concept of water pollution control, President Johnson also recommended to Congress enhanced federal enforcement authority¹⁷⁵ and magnified federal research funding.¹⁷⁶ A secondary theme

Standards . . . mean little without the power to enforce them. Existing Federal authority to abate water pollution [as of 1966] is unnecessarily time-consuming, complex in procedure, and limited in jurisdiction. Steps must be taken to simplify and strengthen these procedures.

I recommend that:

Id.

¹⁷¹ Special Message to the Congress Proposing Measures to Preserve America's Natural Heritage, [1966] 1 Pub. Papers 195, 197 (Feb. 23, 1966).

¹⁷² *Id*.

¹⁷³ *Id*.

¹⁷⁴ Id. at 198.

¹⁷⁵ *Id.* at 198-99. According to Johnson:

- 1. [Existing Federal water pollution statutory law] be amended to eliminate the two mandatory six-month delays that unnecessarily burden its procedures;
- 2. The Federal Government have authority immediately to bring suit to stop pollution, when that pollution constitutes an imminent danger to public health or welfare;
- 3. More weight be given by the courts to the evidence produced in administrative enforcement hearings;
- 4. The Federal Government have the right to subpoena witnesses to appear at administrative hearings;
- 5. The Secretary be given the right to initiate enforcement proceedings when pollution occurs in navigable waters, intrastate or interstate;
- 6. Registration be required of all existing or potential sources of major pollution, and U.S. officials be given the right to inspect such sources; and
- 7. Private citizens be allowed to bring suit in Federal court to seek relief from pollution.

Id.

¹⁷⁶ Special Message to the Congress Proposing Measures to Preserve America's Natural Heritage, [1966] 1 Pub. Papers at 199. President Johnson articulated a vision of water pollution needs as follows:

The river basin proposals I am submitting take advantage of the best techniques available today. They apply new concepts of efficient organization. But if pollution control is to cope with increasing volumes of waste from our growing industry and population, new knowledge and technology are required. It is a challenge to research organizations, both private and public, to develop these technologies.

- There must be new integrated systems of disposal. Many liquid
 wastes can be transformed to solids or gases—or vice versa.
 Research can show which form is least harmful and least costly.
 Research can reduce costs through combined solid-liquid disposal
 systems.
- 2. The technology of water treatment must be improved. We must find ways to allow more "re-use" of waste water at reasonable costs. We must remove or control nutrients that cause excessive growth of plant life in streams, lakes and estuaries. We must take steps to control the damage caused by waters that "heat-up" after cooling generators and industrial engines.
- 3. More must be learned about the effects of pollutants and the present level of pollution. Better equipment must be developed to measure pollution load and movement. We must assess the results of particular pollutants on plant, animal, and human populations. We should continually monitor the quality of our environment, to

of President Johnson's February 1966 message was the need to devote more resources to attacking the nation's air pollution problem by "increas[ing] Federal research, financing, and technical assistance to help States and local governments take the measures needed to control air pollution." In this regard, Johnson said that he was "heartened by the progress" the United States was making in abating air pollution, noting that "[t]he Clean Air Act of 1963 and its 1965 amendments have given us new tools to help attack the pollution that fouls the air we breathe." In this regard, Johnson said that he was "heartened by the progress" the United States was making in abating air pollution, noting that "[t]he Clean Air Act of 1963 and its 1965 amendments have given us new tools to help attack the pollution that fouls the air we breathe.

A tertiary theme of President Johnson's message was his eclectic vision of an American natural heritage that included more national forests, national parks, national lakeshores, national recreation areas, a national trail system, "[p]reservation of [h]istoric [s]ites," and a "[w]ild [r]iver [s]ystem." In a closing rhetorical flourish, Johnson proclaimed what he called "a creed to preserve our national heritage with rights and the duties to respect those rights" in the following language:

- The right to clean water—and the duty not to pollute it.
- The right to clean air—and the duty not to not to befoul it.
- The right to surroundings reasonably free from manmade ugliness—and the duty not to blight.
- The right of easy access to places of beauty and

provide a yardstick against which our progress in pollution abatement can be measured. We must apply the most modern techniques of systems analysis.

Such research will lead to pollution standards suited for each location and type of pollutant. It will permit us to direct our control efforts more efficiently. I am proposing that we spend over \$20 million [in 1967] on this research.

Id

¹⁷⁷ *Id.* (emphasis omitted).

¹⁸⁰ *Id.* at 202.

¹⁷⁸ *Id.* Johnson observed that "[i]n less than 2 years Federal financial assistance [starting with the Clean Air Act of 1963] has stimulated a 50 percent increase in the air pollution budgets of States and local governments. Federal standards for the control of automobile exhausts will apply to the 1968 models." *Id.*; *see supra* notes 108-37 and accompanying text (discussing passage of the 1965 air pollution legislation).

¹⁷⁹ Special Message to the Congress Proposing Measures to Preserve America's Natural Heritage, [1966] 1, Pub. Papers at 201-02.

- tranquility where every family can find recreation and refreshment—and the duty to preserve such places clean and unspoiled.
- The right to enjoy plants and animals in their natural habitats—and the duty not to eliminate them from the face of this earth. 181

2. Muskie's Leadership in Seeking Cleaner Air and Water During 1966

In January of 1966, Senator Muskie's Subcommittee on Air and Water Pollution continued to provide synoptic evaluations of national pollution problems¹⁸² with the publication of a report entitled *Steps Toward Clean Water*. ¹⁸³ After surveying the limited modern history of federal involvement in addressing water pollution, ¹⁸⁴ the report noted that "[t]here are three basic elements in the Federal Government's water pollution control effort: treatment, enforcement, and research. Treatment plans will be disjointed and inadequate if public bodies lack the capability to develop and establish

These rights assert that no person, or company or government has a right in this day and age to pollute, to abuse resources, or to waste our common heritage.

The work to achieve these rights will not be easy. It cannot be completed in a year or 5 years. But there will never be a better time to begin.

Let us from this moment begin our work in earnest—so that future generations of Americans will look back and say: "1966 was the year of the new conservation, when farsighted men took farsighted steps to preserve the beauty that is the heritage of our Republic."

Id. at 203.

Prior to 1955, water pollution control legislation was limited. Until the enactment of the Federal Water Pollution Control Act of 1948, the only role the Federal Government had in water pollution control was contained in three acts: the River and Harbor Act of 1899, the Public Health Service Act of 1912, and the Oil Pollution Act of 1924.

¹⁸¹ *Id.* at 202-03. According to President Johnson:

¹⁸² See supra notes 96-98 and accompanying text (describing staff air pollution study published in 1964).

¹⁸³ STAFF OF SENATE SUBCOMM. ON AIR AND WATER POLLUTION, COMM. ON PUBLIC WORKS, 89TH CONG., STEPS TOWARD CLEAN AIR (Comm. Print 1966).

¹⁸⁴ *Id.* at 1. The Report observed:

meaningful water quality standards."¹⁸⁵ Moreover, the Subcommittee Report contended that "[e]nforcement will mean little if no way is available to achieve adequate treatment. And without research the economic costs of treatment could overwhelm us."¹⁸⁶ Accordingly, *Steps Toward Clean Water* recommended legislation that would provide for a substantial expansion of federal investment in local sewage treatment construction in conjunction with increased federal support for grants and research on advanced waste treatment and water purification technologies.¹⁸⁷ On February 18, Senator Muskie introduced Senate Bill 2947, his bill to continue national water pollution efforts.¹⁸⁸ Muskie told his Senate colleagues that "unless we . . . greatly step up, the present program to deal with the problem of water pollution, by 1980 our water supplies will not be sufficient to meet our water requirements in this greatly expanding technological and industrial society."¹⁸⁹

On February 28, Muskie introduced President Johnson's proposed legislation, Senate Bill 2987, for a targeted river basin approach to national water pollution control. ¹⁹⁰ Muskie observed that President Johnson's proposal was "reassuring evidence of the President's determination to provide strong Executive leadership in dealing with this critical national problem. [President Johnson] is clearly determined to generate substantially increased momentum toward the objective of clean water." ¹⁹¹ Senator Muskie claimed:

The President's proposals are far reaching. They provide additional evidence of his concern with the conservation of the quality of our environment. Taken with the other proposals before us they offer the Congress an opportunity to build an imaginative and sound water quality improvement program on the foundation of the Water Quality Act [of 1965]

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<sup>185</sup> Id. at 2.
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¹⁸⁶ *Id*.

¹⁸⁷ *Id.* at 4.

¹⁸⁸ 112 CONG. REC. 3,454 (1966) (statement of Sen. Muskie).

¹⁸⁹ Id. at 3,455.

¹⁹⁰ 112 CONG. REC. 4,234 (1966) (statement by Sen. Muskie).

¹⁹¹ Id

¹⁹² *Id.* Muskie explained the key features of President Johnson's legislative proposal on clean rivers restoration as follows:

There are three principal features in the administration bill. One provides for the development of coordinated pollution control

Muskie, however, was concerned about President Johnson's reorganization plan to transfer the Water Pollution Control Agency from the Department of Health, Education and Welfare to the Department of Interior. ¹⁹³

In March, Muskie was invited to be part of a Presidential mission to West Germany to "stud[y] its urban problems, including air and water pollution and historic preservation." ¹⁹⁴ In early March, the Presidential study

and abatement programs in selected river basins. This proposal is based partially on the Water Quality Act of 1965. It would, in effect, tie eligibility for Federal sewage treatment construction assistance to participation in a river basin plan which includes the use of water quality standards, expanded enforcement and longterm local financing arrangements.

The second major feature is tightening of enforcement procedures, including a reduction in the time required to implement enforcement actions . . . , authorization for subpoena powers . . . in connection with enforcement procedures, provision for citizen's suits in Federal district courts where damage from pollution is alleged, and expansion of the authority of the [federal government] in setting water quality standards.

Finally, the bill provides for some increases in Federal assistance for sewage treatment construction, an increase in Federal assistance in State pollution control programs and an increase in the authorization for Federal water pollution control research.

Id.

¹⁹³ Press Release, Office of Sen. Edmund S. Muskie (Feb. 28, 1966) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series Box SE 241-6); *see also Pollution and Politics*, NEW REPUBLIC, Mar. 12, 1966, at 6.

The President's message got a chilly reception from Democrats who wrote the recent pollution reform legislation. They point out that the main barrier to speeding the clean-up of polluted waters is lack of federal money: the President proposes to increase the federal portion next year from \$150 million to only \$200 million. The creation of workable river basin compacts is a tricky business. These compacts must originate with the state legislatures which have been notoriously receptive to the blandishments of industry; the whole struggle has been to get the federal program free of states' grasp and under the direction of a forceful administrator in the federal government. Instead of naming a strong, independent commissioner of the new water pollution administration, however, the President appointed James Quigley, who was an assistant secretary at HEW in charge of water pollution in the do-nothing days of Secretary Celebrezze.

Id.

¹⁹⁴ Press Release, Office of Sen. Edmund S. Muskie (Mar. 8, 1966) (on file with the Edmund

group, which included Secretary of Interior Stewart Udall, and other governmental officials, including Muskie as the only member of Congress, scrutinized German air and water pollution control devices in the Ruhr Valley. During March, Muskie also introduced legislation to "broaden and improve" federal clean air requirements and to establish a national water commission. 197

In April and May, Senator Muskie's subcommittee on Air and Water Pollution held hearings on pending water pollution bills. Muskie's subcommittee heard from a number of witnesses who offered reactions to President Johnson's river basin approach to attacking the nation's water pollution problem. Among the more interesting testimony on water pollution was: Senator Abraham Ribicoff's opposition to the concept of "effluent charges," which he opposed because such an approach would tend to legitimize the practice of pollution; oncern by the president of the American Water Works Association that there was a shortage of qualified engineering and scientific expertise to design water purification facilities; and observations by members of conservation groups that the Johnson River Basin approach, in their view, was impractical. Moreover, during May, Muskie summarized the chorus of criticism that had been generated by President Johnson's Reorganization Plan to transfer the Federal Water Pollution Control Administration from one federal department to another. Muskie

S. Muskie Archives, Bates College, U.S. Senate Series, Box S.E. 241-6).

¹⁹⁵ *Id*.

¹⁹⁶ Press Release, Office of Sen. Edmund S. Muskie (Mar. 21, 1966) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 241-6). The Muskie bill had two key features: it proposed "extend[ing] annual authorizations for [federal] air pollution control and abatement programs" for six more years at an increased funding level and "provid[ing] for matching grants to [state] air pollution agencies" *Id*.

¹⁹⁷ Press Release, Office of Sen. Edmund S. Muskie (Mar. 23, 1966) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 241-6).

¹⁹⁸ CONG. QUARTERLY SERV., CONG. QUARTERLY ALMANAC 638 (1966) [hereinafter 1966 C.Q. ALMANAC].

¹⁹⁹ *Id*.

²⁰⁰ *Id.* at 639.

²⁰¹ *Id.* at 639-40.

²⁰² 112 Cong. Rec. 11,531 (1966) (statement by Sen. Muskie). Muskie stated: [O]n May 10, 1966, the Federal Water Pollution Control Administration was transferred under Reorganization Plan No. 2 from the Department of Health. Education, and Welfare to the Department of the Interior.

balanced this criticism, however, with a statement to the press praising the Federal Water Pollution Control Administration's first set of water quality guidelines published in May of 1966.²⁰³

In June, Muskie conducted hearings of the Senate Subcommittee on Air and Water Pollution in Washington, D.C. regarding implementation of the Clean Air Act, a proposed solid waste bill, and air contamination by lead and other hazardous substances.²⁰⁴

In July, Senator Muskie's Air and Water Pollution Subcommittee, acting through the Senate Public Works Committee, issued favorable reports on both proposed air pollution control legislation and water pollution control legislation. With regard to air pollution legislation in 1966, Muskie's subcommittee made several significant statements in its Report on the Clean Air Act Amendments.²⁰⁵ First, the Senate Report provided an historical context:

Members of Congress and others raised serious questions about the transfer when it was proposed. Questions are still being raised about the effectiveness of the Federal water pollution control and abatement program in its new home.

Id. But see Press Release, Office of the White House Press Secretary (Feb. 28, 1966) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 520-2) (defending the decision to move the Administration to the Department of the Interior); William M. Blair, Key U.S. Aides Quit Pollution Agency: Battle to Clean Up Nation's Water Supplies Imperiled by Exodus of Personnel, N.Y. TIMES, Apr. 24, 1966 ("An exodus of administrative, scientific and technical personnel, resulting from a governmental reorganization, is threatening to slow down President Johnson's efforts to clean up the nation's water supplies.").

²⁰³ Press Release, Office of Sen. Edmund S. Muskie (May 12, 1966) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 321-4). Muskie said:

The Federal Water Pollution Control Administration made an excellent start in its program with the water quality standards guidelines published May 10, 1966. The guidelines are clear, concise and consistent with the language of the Water Quality Act of 1965 and Congressional intent to enhance the quality of our water resources.

Id.; *see* DEPT. OF INTERIOR, FEDERAL WATER POLLUTION CONTROL ADMINISTRATION, GUIDELINES FOR ESTABLISHING WATER QUALITY STANDARDS FOR INTERSTATE WATERS (May 1966) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series Box SE 321-4).

²⁰⁴ Press Release, Subcomm. on Air & Water Pollution, Senate Comm. on Public Works (June 3, 1966) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 241-8).

²⁰⁵ See S. REP. No. 89-1361 (1966).

As a byproduct of industrialization, urbanization, and increasing standards of living, air pollution continues to be a widespread and growing hazard to the health and welfare of the United States. Although important progress has been made in the brief period since enactment of the [air pollution] act in 1963, a sustained and accelerated effort is needed if the promise of the act to prevent and control air pollution is to be fulfilled.²⁰⁶

Second, the Senate Report sifted through the testimony given before Muskie's Subcommittee during 1966 on lead pollution and raised several technical questions that needed to be answered before national legislative standards governing lead could be promulgated.²⁰⁷ Third, in a similar vein, the Senate Report noted: "An associated problem which the committee feels deserves further investigation is the feasibility or the desirability of eliminating lead in gasoline as a means of diminishing environmental lead contamination."²⁰⁸ The Report commentary went on to note:

- (1) What are the cumulative effects of subclinical exposure over long and short periods of time?
- (2) What dangerous effects of abnormal storage in the bones are likely to result from the normal course of events and from accidents with massive bleeding and dissolution of bone tissues?
- (3) What synergistic effects can be anticipated with subclinical concentrations of lead combined with other environmental and somatic agents, either those present in significant quantities now or projected for the future?
- (4) Are present levels dangerous either clinically or subclinically in the ways suggested?
- (5) Are levels in danger of increasing to hazardous levels?
- (6) Are levels unnaturally high (though safe) to the point where unpredictable incidents of a lead or nonlead nature can cause toxicity?

²⁰⁶ *Id.* at 3.

 $^{^{207}}$ The Senate Report found six "basic questions which demand answers" regarding lead contamination. *Id.* at 9. These were:

There is controversy over the cost and economic effect of eliminating lead compounds from gasoline. The majority of atmospheric lead is held to come from lead compounds in auto exhausts. Further hearings should concentrate on this aspect of the problem before any legislative or administrative control action can be taken.²⁰⁹

Fourth, looking at the long term future, the Senate Report urged the following course of administrative action via a proposed "task force to investigate means of reducing air pollution by use of *new methods of transportation not involving the internal combustion engine.*" In remarkably prescient and synoptic language, the Senate Report urged:

A variety of projects deserve more detailed . . . study. Electrification of mass transit, use of battery-operated delivery vehicles and autos, and prospects for fuel cells to run individual passenger cars, all suggest research possibilities. The Federal Government should ensure that research, development, and demonstration work in this area is carried on at maximum levels consistent with orderly progress. . . .

Urban planning, public works, zoning, and licensing questions are inexorably intertwined with pollution problems. Perhaps nowhere is this more evident than in the area of transportation. The aim should be to combine the best thinking on air pollution, urban development, and transportation to deal with a problem which could literally smother cities in smog and smoke unless new approaches are developed and utilized. . . .

Burgeoning population, increasing number of vehicles, growing air pollution—all these factors indicate that to continue to solve this problem with piecemeal measures is unacceptable. Plans for new federally supported freeways should not be allowed to cancel out Federal efforts to halt air pollution. Dumping thousands of cars off the end of an eightlane highway into an urban complex is not the answer to

²⁰⁹ Id.

²¹⁰ S. REP. No. 89-1361, at 11 (emphasis added).

either transportation or air pollution problems.

The committee therefore recommends that the task force develop a plan for a "model environment" including such proposals as will both meet the economic needs of a rapidly expanding nation and adequately protect the public from the hazards associated with polluted air.²¹¹

The July 1966 Report on the Clean Rivers Restoration bill by Senator Muskie's Air and Water Pollution Subcommittee, acting through the Senate Public Works Committee, ²¹² also contained numerous points of interest. Initially, the Senate Report explained the significance of Senate Bill 2947, the water pollution abatement bill it was recommending for passage:

S. 2947 can be considered the first omnibus water pollution control act. It extends and broadens the existing program; it provides a new emphasis in the clean rivers concept; it strengthens other existing law . . . and it manifests the total commitment of the Federal Government to abatement of the pollution one [sic] of the Nation's most vital resources.²¹³

Second, the Senate Report expounded on the historical context of the Johnson Administration's Clean Rivers Restoration Program, as modified by Muskie's Subcommittee. As detailed in the Senate Report:

The Clean Rivers Restoration Program as established in S. 2947 is a modification of . . . S. 2987, the administration's proposal. It is an expansion of the concepts developed by the Congress in the . . . Water Quality Act of 1965. The committee, in authorizing a clean rivers program, has provided a method whereby necessary planning can be achieved in river basins or portions of river basins as part of a broader approach to pollution control.

The committee does not intend that the impetus created by the [1965] Water Quality Act be slowed by the use of river

 $^{^{211}}$ *Id*

²¹² S. Rep. No. 89-1367 (1966).

²¹³ *Id.* at 3.

basin planning. The standard setting procedure established in 1965, while not progressing as rapidly as it might due to the delay created by transfer of the Water Pollution Control Administration to the Department of Interior, should not be altered or delayed by this act.

Under the clean rivers program, the Secretary is authorized to make 50-percent grants for construction of treatment works and sewer facilities within a designated river basin or portion thereof.

In return for the additional 20-percent Federal grant provided under the clean rivers program, the States must expand their commitment to effective pollution control. S. 2947 provides that the States must, among other things, in order to qualify projects for the 50-percent grant, provide 30 percent of the cost of each project within the designated river basin or portion thereof. The States must also give satisfactory assurance that enforceable water-quality standards either are in effect or will be established on all waters within the State.²¹⁴

Third, the Senate Report stressed the provisions of the recommended bill that would, in its words, provide "for an aggressive and imaginative research effort" to address emerging water pollution problems in the United States.²¹⁵ These water pollution research needs, in the view of Muskie's Subcommittee, entailed:

[T]he major problems of municipal and industrial wastes and storm and combined sewer discharges . . . [in addition to]

²¹⁴ *Id.* The Senate Report provided further elaboration on the Clean Rivers Restoration Program as follows:

The planning agency designated under the clean rivers program is expected to develop comprehensive pollution control and abatement plans which are consistent with water quality standards established pursuant to the Water Quality Act and provide the most effective and economic means of sewage treatment, including multimunicipal or municipal-industrial treatment works construction.

Id.

²¹⁵ *Id.* at 4.

problems resulting from handling and disposal of radioactive wastes, waste discharged from boats and ships, household or small waste disposal systems, accelerated eutrophication and algae blooms, animal feedlot wastes, agricultural runoff, acid mine drainage, and other diverse sources of pollution.

Research on water quality requirements for all water uses and the persistence and degradation of pollutants in the water environment must be accelerated to help establish water quality criteria and standards. Improved techniques for sampling and identification of pollutants are needed to insure an effective implementation of a water pollution control program.²¹⁶

Fourth, the Senate Report explained that the proposed legislation provided for funds to conduct the first comprehensive study "on the extent and nature of pollution of estuarine zones of the United States," such as the Chesapeake Bay and the bays and harbors of Hawaii. 217 A fifth interesting aspect of the 1966 Senate Report recommending expanded national water pollution abatement legislation was its non-binding policy recommendations regarding incentives for industry to "reduc[e] the cost of noneconomic pollution control facilities."²¹⁸ In this regard, Muskie's Subcommittee suggested further congressional exploration of "[i]nvestment tax credits," "accelerated amortization of the cost of [water] pollution control facilities," publically operated "joint municipal-industrial treatment systems," and targeted federal grants to municipalities for construction of industrial waste treatment facilities. ²¹⁹ Finally, the Senate Report offered incisive and critical commentary on the poorly regulated problem of radioactive pollution from uranium mill tailings piles in the western part of the country, concluding in stern, albeit precatory, language: "The question of radioactive exposure is so important and the existing knowledge is sufficiently sparse that the committee must accept the concept that 'the population permissible dose for manmade radiation be based on the average natural background level." 220

²¹⁶ Id

²¹⁷ S. REP. No. 89-1367, at 5.

²¹⁸ *Id.* at 14.

²¹⁹ *Id.* at 15.

²²⁰ Id. at 18.

July 1966 also saw Senator Muskie act as Senate floor manager in achieving back-to-back unanimous Senate votes for passage of air pollution legislation on July 12²²¹ and water pollution legislation on July 13, 1966.²²² First, with regard to Senate Bill 3112, the Clean Air Act Amendments of 1966, Muskie reminded his Senate colleagues of the recent history of Senate focus on problems of air pollution, going back to the formation of the Subcommittee on Air and Water Pollution by the late Senator Pat McNamara, three and one half years earlier. Muskie said:

Our first major legislation from that subcommittee was the Clean Air Act of 1963. That legislation launched a vigorous Federal program to aid the States and local governments to combat the ever-increasing threat of polluted air. Last year [in 1965], we amended the Clean Air Act to initiate controls on harmful automotive exhaust emissions, and we added the Solid Waste Disposal Act to our arsenal of weapons in the fight for an improved environment.

Today, we bring to the Senate additional amendments to the Clean Air Act. These amendments have the vigorous backing of the members of the Public Works Committee, on both sides of the aisle. They are evidence of the continued concern of our committee with the problems of air pollution and [our] determination . . . to maintain our search for improved ways of reducing the hazards of air pollution.

Today's legislation is a step forward, but it is not the end of our efforts. We cannot rest until we have removed the threats to man's health, well-being and economic advancement which man himself creates in a modern, technological society.²²³

²²¹ Senate Bill 3112 was passed by an 80-0 roll call vote of the Senate on July 12, 1966. 112 CONG. REC. 15,262 (1996).

²²² Senate Bill 2947 was passed by a 90-0 roll call vote on July 13, 1966. *Id.* at 15,632.

²²³ 112 Cong. Rec. 15,249 (1966) (statement of Sen. Muskie). Senator Muskie explained the details of Senate Bill 3112 to his colleagues. *See id.* at 15,249-57. A number of Muskie's colleagues praised him for his legislative acumen on air pollution policy. *See*, *e.g.*, *id.* at 15,253 (praise by Sen. Boggs); *id.* at 15,254 (praise by Sen. Cooper); *id.* at 15,256-57 (praise by Sen. Randolph).

Second, with regard to Senate Bill 2947, the Federal Pollution Control Amendments and Clean Rivers Restoration Act of 1966, Senator Muskie, as floor manager, observed on July 13 that "it is no accident that the Senate is considering major pollution abatement and control legislation for the second day in a row." Speaking of a sea of change in the consciousness of the nation and the mood of the Senate, Muskie rose to the Senate floor and said:

Yesterday, we approved—by a vote of 80-0—amendments to the Clean Air Act. Today we are taking up amendments to the Water Quality Act of 1965 and the basic Federal Water Pollution Control Act. There are 48 sponsors on today's bill. It has the unanimous support of the members of the Committee on Public Works.

All of this is an indication of the importance the American people attach to the improvement of the quality of our environment. The President has called for action.... And we have developed legislation designed to repair the damage of past and present waste and to upgrade the quality of our Nation's waters.

We can, as Members of this Congress, take pride in the legislation we have developed. It bears the fruit of many minds on both sides of this Chamber.²²⁵

Muskie continued to lead Senate consideration of the pending water pollution abatement legislation with a personal reflection on his labors in helping to craft environmental legislation over the previous three years:

In the early days of our work, I sometimes despaired of progress in this field. But in the last year [1965-66] we have seen a remarkable shift in opinion and support.

Industries who once opposed us are now eager to get on with the job. State officials who viewed our proposals with alarm want to coordinate their pollution control programs more effectively with other States and with the Federal Government. Federal officials who were open in their skep-

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²²⁴ 112 CONG. REC. 15,585 (1966) (statement of Sen. Muskie).

²²⁵ *Id*.

ticism now find our legislation useful and challenging.

And behind all these changes is the voice of the American people, demanding an end to the waste of our resources, insisting on an effective program, supported by the needed funds to do the job. . . .

[W]e have a mandate—from our constituents and from our posterity—to get on with the job of protecting our water resources. We do not have much time. We do not have all the answers. But we know enough about our needs . . . to make a substantial beginning toward ending the burdens of inadequate and poor quality water supplies. ²²⁶

In a persuasive rhetorical flourish, Senator Muskie asked for, and received, unanimous consent to include in the *Congressional Record* a series of articles and editorials from Maine newspapers, arguing to his Senate colleagues that "these are but a sampling, from one State—a State which has an abundance of water resources. The problems of Maine can be multiplied a hundredfold for the Nation as a whole. The legislation we are offering today is designed to help answer these problems."²²⁷

A July 15, 1966 editorial entitled *Muskie Scores 1-2-3* in the *Portland Evening Express*²²⁸ praised Senator Muskie as follows: "On three successive days the Senate passed three different important bills, each largely the handiwork of Senator Muskie." The editorial noted:

On Monday, the Senate passed by voice vote a Muskiebacked bill to help in the acquisition, preservation and restoration of historic sites, significant to United States history and culture.

On Tuesday, the Senate passed a \$196 million Muskie-sponsored authorization to expand the Clean Air Act. The roll-call vote was 80-0.

On Wednesday the Senate gave a 90-0 mandate authorizing \$6.2 billion over the next 6 years to support the Muskie-

²²⁶ *Id.* at 15,586.

²²⁷ *Id.* Muskie received lavish praise from his colleagues regarding his efforts in promulgating the water legislation. *See id.* at 15,595-97 (statement by Sen. Boggs); *id.* at 15,596 (statement by Sen. Bartlett).

²²⁸ Muskie Scores 1-2-3, PORTLAND EVENING EXPRESS, July 15, 1966.

²²⁹ Id.

led fight against the pollution of our national rivers and waterways and coast.

The 1-2-3 success in 3 days of these bills, all of major importance to Maine, and the unanimous consent given to Muskie's once controversial measures to combat air and water pollution may establish some kind of record in the Senate.

But of greater significance is the beneficial impact these bills will have on America for generations to come.

To regard the bills which fight air and water pollution merely as a defensive cure against the dumping of smells and sewage is to pay them only half the credit they deserve.

For these bills are also positive and creative measures. . . .

We applaud the fine results accomplished this week by Senator Muskie. When he took up the cudgels in Washington for the fight against pollution of air and water, strong opposition faced him from many quarters. He has ended his fight with unanimous support in the Senate for both measures.

Good going Senator!²³⁰

In August, Senator Muskie offered a proposal to create a Select Committee on Technology and the Human Environment.²³¹ In his typical thoughtful and creative way, Muskie explained the rationale for his proposed resolution in the following manner:

Each day we are asked to make decisions on legislation which may have profound implications in the years ahead. But we are conscious of our inadequate knowledge of tomorrow and of the rapid changes changing technology is making in our environment. We are also conscious that too often we do not have the time or the resources to make use of the information which is available.

²³⁰ *Id.* See also the following additional positive editorials in national newspapers: *Mandate for Clean Water*, WASH. POST, July 15, 1966, at A18; *The Senate Acts on Pollution*, N.Y. TIMES, July 15, 1966, at 30.

²³¹ 112 CONG. REC. 20,542-43 (1966) (statement of Sen. Muskie).

Too often we have heard criticism of our reliance on noncongressional sources for the basic data and evaluations which lead us to the decisions we make. It has been suggested that with our limited staffs and time demands, we are at the mercy of the vast resources of the executive branch, which can develop and mold information to lead us to their conclusions.

The suggestion is an over exaggeration, but has a semblance of truth, and I fear that it will be a growing truth. I fear this because of the way we must deal with legislation. *Our environment cannot be neatly divided into simple components*. There is an interrelationship between our urban growth and our natural resources program as there is between transportation and housing, health and pollution. Yet the Senate must, in order to conduct its business, divide itself into committees to consider separate aspects of legislation affecting human environment. . . .

What I am proposing is a means to alleviate the time pressures on the standing committees and to assure that needed information is not overlooked. This can be done with a select study committee composed of members from legislative committees with interrelating interests.²³²

In September, Muskie was featured in a prominent article in the *New York Times* entitled *Nation is Facing All-Out Battle For Cleaner Air*.²³³ He was quoted in the article: "In terms of reducing the threat [of air pollution in America], I don't think we've even scratched the surface." Moreover, Muskie appeared on two hour-long television specials: September 18 on NBC-TV in the special report *Air of Disaster* and September 20 on CBS-TV in the special program entitled *The Poisoned Air*.²³⁵

²³² *Id.* at 20,542-43 (emphasis added).

²³³ Gladwin Hill, *Nation is Facing All-Out Battle for Cleaner Air*, N.Y. TIMES, Sept. 26, 1966, at 1.

²³⁴ *Id.* at 36 (quoting Sen. Muskie).

²³⁵ Press Release, Office of Sen. Edmund S. Muskie (Sept. 15, 1966) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 242-2). Regarding the September 20th program on CBS-TV, Senator Muskie discussed "the problems and the costs facing industry in the national air pollution abatement effort, and the need to make

In October, Muskie participated in conferences to reconcile the provisions of the air and water pollution legislation which had passed the Senate in July. ²³⁶ On October 14 he addressed his fellow senators on conference amendments to the clean air bill.²³⁷ The Senate accepted the Conference Report, which had reconciled authorization funding levels for various programs and accepted the House provisions which indicated that federal grants for these programs would not displace state or local funds.²³⁸ On October 17, Muskie, speaking from the Senate floor, urged his colleagues to accept the Conference Report on Senate Bill 2947, the clean water bill. ²³⁹ The Senate accepted the Conference Report, which had made a number of changes to its bill. These changes consisted of: reduction of fiscal authorization for the sewage treatment construction program; modification of matching local and state funding requirements for construction projects; and elimination of basin planning as a requirement for federal construction grants; and modification of authorized funding for research, among other changes.²⁴⁰ President Johnson signed the air pollution abatement legislation into law on October 15²⁴¹ and the water pollution abatement legislation into law on November 3.242

In December, Muskie received and considered a staff memorandum from Leon Billings of the Senate Air and Water Pollution Subcommittee.²⁴³ This communication raised the emerging controversy, being engendered by the automobile industry, that vehicle emission devices were allegedly expensive hoaxes and were "unwise, unnecessary, and a wasted public investment."²⁴⁴ To address this controversy, Billings advised Muskie that the

progress now in cleaning [the nation's] skies." *Id.* "The special program . . . survey[ed] the local, national and international aspects of air pollution [and] recount[ed] some of the most striking air pollution disasters" *Id.* "Special emphasis [was] given to the role of the automobile, the largest single source of air pollution." *Id.*

²³⁶ See infra notes 237-39 and accompanying text.

²³⁷ 112 CONG. REC. 26,808-09 (1966) (statement by Sen. Muskie).

 $^{^{238}}$ *Id*.

²³⁹ 112 CONG. REC. 27,244-47 (1966) (statement of Sen. Muskie).

²⁴⁰ 112 CONG. REC. 27,137-39 (1966) (statements of Sen. Blatnik and Sen. Cramer).

²⁴¹ 1966 CO ALMANAC, *supra* note 198, at 687.

²⁴² *Id.* at 645.

²⁴³ Memorandum from Leon Billings to Senator Edmund S. Muskie on Field Hearings on Automotive and Related Air Pollution (Dec. 1, 1966) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 811-7).
²⁴⁴ *Id.*

subcommittee should hold field hearings on the subject in a number of cities during 1967.²⁴⁵

3. Muskie's Environmental Speeches During 1966

With the bipartisan consensus on relatively stringent federal air and water pollution legislation which emerged during 1966, the nation reached a turning point in environmental consciousness. The environment, for the first time, came to be perceived by the American public as a significant national problem during 1966. In turn, Senator Muskie became known as the most knowledgeable public figure in the country on matters of air and water pollution. While Muskie had been invited to give speeches and presentations on environmental issues in prior years, during 1966 the number of these invitations increased and the prestige of the audiences became enhanced.

Some of the more notable examples of his important speeches on environmental policy delivered during 1966 are discussed below.²⁴⁸ On March 1, Muskie addressed the American Water Works Association in Washington, D.C. in a speech entitled *Water Quality and the National Interest*.²⁴⁹ He told his audience that "[o]ur population has grown to a point where . . . our water needs are almost greater than the available supply. At the same time we have succeeded in creating chemical and radioactive wastes whose characteristics have almost defied our efforts to clean them up."²⁵⁰ On May 16, Muskie lectured an assembly of Agriculture Officials in the nation's capital on *Environmental Improvement—Institutional and Governmental Aspects*.²⁵¹ Muskie started this speech with an observation: "The problems of

²⁴⁵ Id

²⁴⁶ See supra notes 182-245 and accompanying text.

²⁴⁷ See, e.g., Blomquist, Dawn, supra note 3, at 526-40 (describing speeches in 1959).

²⁴⁸ In addition to his prepared speeches, Muskie also appeared on national network television programs on environmental issues during 1966. *See, e.g., supra* note 235 and accompanying text. Moreover, he also contributed articles to various national trade journals on environmental issues. *See, e.g.,* Edmund S. Muskie, *Legal Drive Seeks Clean U.S. Air,* AM. TRIAL LAW. MAG., Feb/Mar. 1966, at 22; Edmund S. Muskie, *That LifeGiving Substance We Breathe is Polluted!*, THE CARPENTER, Mar. 1966, at 10.

²⁴⁹ Edmund S. Muskie, Water Quality and the National Interest, Remarks at the Public Water Supply Seminar, American Water Works Assn. (Mar. 1, 1966) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 242-8).

²⁵¹ Sen. Edmund S. Muskie, Environmental Improvement—Institutional and Governmental

pollution are not new. They have plagued man from the earliest civilizations. Man cannot live without creating wastes, and those wastes represent a potential threat to his health and life itself."²⁵² A highlight of his address was his characterization of environmental contamination as a "social problem," noting:

Our increasing energy needs—for manufacturing, heating and cooling, and transportation—have led us to a dangerous point in polluting the air we need to sustain life.

And in our pollution of the water and the air we have made subtle changes which threaten the very balance of man's body and mind.

Contamination of the environment is a social problem. Up to a point we can reduce the problem by individual action—by restraining the impulse to throw litter on the pavement or in the park, by keeping our cars and furnaces in good operating order, or by observing sound conservation practices on our own property. But in a society as complex as ours, where practically everything we do to maintain life and to produce goods and services results in contamination of the environment, *public decisions and actions are needed to improve the environment*. ²⁵³

On August 26, Senator Muskie addressed the International Water Quality Symposium in Montreal, Canada, speaking on the topic *From Hercules to the Space Age—Our Quest for a Cleaner Environment*.²⁵⁴ Muskie began with a look back over his public career as a governor and a United States senator and juxtaposed this personal experience with the ancient Greek myth of Hercules. Muskie said:

Aspects, Remarks at Environmental Improvement . . . Air, Water, and Soil (May 16, 1966) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 243-3).

²⁵² *Id.* at A-2.

²⁵³ *Id.* at A-2 to A-3 (emphasis added).

²⁵⁴ Edmund S. Muskie, From Hercules to the Space Age—Our Quest for a Cleaner Environment, Remarks before the Leadership Luncheon, 1966 International Water Quality Symposium (Aug. 26, 1966) (transcript on file with the Edmund S. Muskie Archives, U.S. Senate Series Box S.E. 243-6).

Since 1959 I have been directly involved in the development of water pollution control and abatement legislation for the United States. Prior to that time, as Governor of Maine, I was concerned with the improvement of water quality through state and local action. In that time I have seen a tremendous change in public opinion and corporate concern over the problem of pollution and water supply.

Ten years ago [in 1956], public policy and private inclinations followed the example of Hercules. You may remember that Hercules—who could be called one of our earliest sanitary engineers—was given the task of cleaning the Augean Stables. According to Bulfinch, "Augeas, King of Elis, had . . . three thousand oxen, whose stalls had not been cleansed for thirty years. Hercules brought the rivers Alpheus and Peneus through them, and cleansed them thoroughly in one day."

Thus ended the third labor of Hercules. There is no record of what happened to the two streams, or to those who lived downstream from the stables. Perhaps Hercules had calculated the assimilative capacity of the streams and avoided a public nuisance or an endangerment to health and welfare. Fortunately, the Herculean approach to waste disposal is going out of style.²⁵⁵

In his Montreal speech, Muskie also observed that "[p]ollution is no longer the problem of isolated areas. It is a national and international problem. Looking ahead, I can see the day when international institutions or arrangements will be necessary to help protect men and women against the harmful effects of pollution." Concluding his remarks, Muskie came back, again, to the myth of Hercules:

The future of man depends on the future of his environment. The control of that environment and its improvement is

²⁵⁵ *Id.* at 1-2 (handwritten markups in manuscript).

²⁵⁶ *Id.* at 8 (handwritten markups in manuscript).

and must be a constant experiment. And, within the framework of logic and the application of scientific techniques, it must remain essentially a process of trial and error.

In our own countries and on the international scene we cannot create political institutions in the laboratory which can be set down in the world as perfect instruments for the implementation of public policy. We have a social as well as a biological inheritance, and changes in social and political structure must be made with care. But they must be made, and soon, if man is not to waste his birthright and ignore his trusteeship for future generations.

When Hercules cleaned the stables he polluted the rivers. He didn't worry about the effect of his actions on someone else, but we must.²⁵⁷

On October 21, Senator Muskie spoke to the Steel Economics Seminar at Notre Dame University on *Public Policy Consideration in Air and Water Pollution Abatement*.²⁵⁸ Muskie reiterated some of the themes of his earlier speeches of 1966,²⁵⁹ including the myth of Hercules. Muskie added something new, however, to his Notre Dame address, focusing on the comparisons between air, water and soil pollution:

There is, as you know, an interrelationship between air, water and soil pollution. But the problems of each are sufficiently unique to require different scientific and institutional control techniques.

The location, geographic boundaries, condition, source and direction of the flow of water can be identified, measured, and—within certain limitations—predicted. Atmospheric conditions are far less subject to precise measurement or accurate prediction. Polluted water can be collected, controlled, and carried considerable distances for treatment or

²⁵⁷ *Id.* at 9-10 (handwritten markups in manuscript).

²⁵⁸ Edmund S. Muskie, Public Policy Consideration in Air and Water Pollution Abatement, Remarks at the Steel Economics Seminar (Oct. 21, 1966) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 635-4).

²⁵⁹ See supra notes 249-57 and accompanying text.

disposal. Polluted air must be prevented at the source of emission.²⁶⁰

On November 19, Muskie spoke to the National Conference of State Legislative Leaders in Washington, D.C. on the topic, *Crisis in Our Cities*. ²⁶¹ Espousing federal legislation that would foster comprehensive and integrated urban planning and policy implementation, Muskie spoke in terms of what he called "the total environment of the cities." ²⁶² His specific text on this point stated:

We have learned from the shortcomings of the past that fragmented, uncoordinated applications of individual programs—however desirable in and of themselves—will not correct the spiralling [sic] crisis of the cities.

What we propose to do in dealing with the problems of urban areas is analogous to our aerospace program, where several years ago we abandoned the practice of trying to fit separately developed components together. Now we use the systems approach to complex, but interrelated problems.

The housing, education, job opportunity, physical and social needs of men and women are part of the total environment of the cities. They should be treated as such.²⁶³

On November 22, he continued to speak about urban problems in America, before the Yale Political Union, in a speech entitled *The City and Creative Federalism*.²⁶⁴ On December 14, Senator Muskie addressed the National Conference on Air Pollution in Washington, D.C. in a speech

²⁶⁰ Edmund S. Muskie, Public Policy Consideration in Air and Water Pollution Abatement, Remarks at the Steel Economics Seminar, *supra* note 258, at 7 (handwritten markups of manuscript).

²⁶¹ Edmund S. Muskie, Crisis in Our Cities, Remarks during a Panel Discussion Before the National Conference of State Legislative Leaders (Nov. 19, 1966) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 635-5).

²⁶² *Id.* (handwritten markups of manuscript).

²⁶³ *Id.* (handwritten markups of manuscript).

²⁶⁴ Edmund S. Muskie, The City and Creative Federalism, Remarks Before the Yale Political Union (Nov. 22, 1966) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 635-6).

entitled *Setting Goals for Clean Air*.²⁶⁵ Characterizing air pollution as "one of the most serious domestic crises we face,"²⁶⁶ he went on to opine: "Air pollution control may cost jobs—but so does air pollution. Air pollution control may disrupt certain industries—but air pollution disrupts and destroys lives. More and more Americans are willing to pay the cost of controlling pollution rather than suffering the penalty of inaction."²⁶⁷ Then, Senator Muskie broached the subject of national goals. He said:

We must decide how best to pay the cost of control and how best to organize our efforts. And those decisions will depend on how we define our goals.

To date we have set limited goals for ourselves. We have focussed [sic] on individual pollutants, their weight, their amount, and their immediate and observable effect. We have considered specific emission standards to control individual sources of contamination. We have passed ordinances to reduce smoke; we have planned limitations on sulphur content in fuels used in certain cities; we have taken abatement action against specific polluters.

These were necessary first steps, but they are not adequate for an effective campaign to improve the quality of our air.

The American people are not really concerned about the source or the composition of dirty air. They want clean air.

The American people do not care about the statistical analyses describing health effects from specific pollutants. But they do not want to die or suffer from dirty air. The American people want to be assured an adequate supply of breathable, healthful air. And they have a right to it.

All of this suggests to me that those of us who deal with this problem as representatives of the people should direct our attention to a concept of air quality. We need to set a national clean air goal which says that—within our control—no

²⁶⁵ Edmund S. Muskie, Setting Goals for Clean Air, Address to the National Conference on Air Pollution (Dec. 13, 1966) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series Box 242-3).

²⁶⁶ *Id.* at 1.

²⁶⁷ *Id.* at 3.

emissions will be permitted which cause the quality of air to deteriorate below acceptable health standards. ²⁶⁸

Muskie's National Conference on Air Pollution speech was reported in an article in the *Washington Post* that interpreted the address as a "hard-nosed approach" which "foreshadow[ed] enactment of legislation that would implement" his call for a national clean air goal.²⁶⁹ Indeed, Muskie's speech did foreshadow the goal-oriented national ambient air quality standards approach of what would become the Clean Air Amendments of 1970.²⁷⁰

- III. MUSKIE'S RISE TO NATIONAL PROMINENCE AND THE INCREASED POLITICAL SALIENCE OF AMERICAN ENVIRONMENTAL ISSUES, 1967-68
- A. Polluters Beware, 1967
- 1. President Johnson's Message on Protecting Our National Heritage

In January of 1967, President Johnson sent a message to Congress regarding Protecting Our National Heritage.²⁷¹ The first, and most substantial part of the message was entitled "The Pollution of Our Air."²⁷² The President described the full dimension of "[t]he [p]roblem" of air pollution by linking the issue to specific American cities and towns and people living in those cities and towns. He emphasized the experience of New York City by stating:

Two months ago [in November of 1966], a mass of heavily polluted air—filled with poisons from incinerators, industrial furnaces, powerplants, car, bus and truck engines—settled down upon the 16 million people of Greater New York.

For four days, anyone going out on the streets inhaled chemical compounds that threatened his health. Those who

²⁶⁹ Morton Mintz, *Muskie Asks Adoption of a 'Clean Air Goal*,' WASH. POST, Dec. 14, 1966, at A7.

²⁶⁸ Id

²⁷⁰ See Clean Air Amendments of 1970, Pub. L. No. 91-604, 84 Stat. 1676 (1970) (codified at 42 U.S.C. § 1857).

²⁷¹ Special Message to the Congress: Protecting Our Natural Heritage, [1967] 1 PUB. PAPERS 93 (Jan. 30, 1967).

²⁷² See id. at 93-97.

remained inside had little protection from the noxious gases that passed freely through cooling and heating systems.

An estimated eighty persons died. Thousands of men and women already suffering from respiratory diseases lived out the 4 days in fear and pain.

Finally, the winds came, freeing the mass of air from the weather-trap that had held it so dangerously. The immediate crisis was ended. New Yorkers began to breathe "ordinary" air again.

Ordinary air in New York, as in most large cities, is filled with tons of pollutants: carbon monoxide from gasoline, diesel, and jet engines, sulfur oxides from factories, apartment houses, and powerplants; nitrogen oxides, hydrocarbons and a broad variety of other compounds. These poisons are not so dramatically dangerous most days of the year, as they were last Thanksgiving in New York. But steadily, insidiously, they damage virtually everything that exists.²⁷³

President Johnson continued the prefatory comments on the problem of American air pollution in 1967 by alluding to other aspects and places of pollution. He observed:

[Air pollution] aggravate[s] respiratory problems in man—asthma, bronchitis, lung cancer, and emphysema. Emphysema, a lung disease, is one of the fastest growing causes of death in the United States today. And it forces more than a thousand workers into early retirement every month.

Polluted air corrodes machinery. It defaces buildings. It may shorten the life of whatever it touches—and it touches everything.

This is not a problem of our largest cities alone. Weirton, West Virginia, and Gary, Indiana, are two among many communities that suffer days when the sun seems a pale orange ball hidden in a noxious cloud. Small towns, farmlands, forests—men, animals and plants—are all affected by the waste we release into the air.

²⁷³ *Id.* at 93 (emphasis added).

The economic loss from pollution amounts to several billions [of dollars] each year. But the cost in human suffering and pain is incalculable.

This situation does not exist because it was inevitable, nor because it cannot be controlled. Air pollution is the inevitable consequence of neglect. It can be controlled when that neglect is no longer tolerated.

It will be controlled when the people of America, through their elected representatives, demand the right to air that they and their children can breathe without fear.²⁷⁴

President Johnson's rhetoric in his 1967 message was markedly more strident and aggressive than his two previous environmental messages issued in 1965²⁷⁵ and 1966.²⁷⁶ Indeed, building on a summary of past legislative and executive air pollution control initiatives, ²⁷⁷ President Johnson laid out for

We have proposed and the Congress has enacted three laws since 1963, each representing some forward movement toward cleaner air.

Under these laws, we are spending more than \$25 million this year [in 1967] in matching grants to cities and states, and in research and other efforts:

- We have helped to create 80 local air pollution programs, and to strengthen 40 others.
- We are working in nine areas of the United States—including the New York-New Jersey area—to abate pollution that passes across State lines and is beyond the reach of any single State or city.
- We have established a system of national standards for motor vehicles, that will become effective with the 1968 models. These will require sharp reductions in pollution from automobile exhausts.
- We have begun by Executive Order to control the sources of air pollution on Federal installations throughout the country. The experience we gain in carrying out this order will help us develop more effective ways of controlling pollution elsewhere.
- We have intensified our research work on sulfur oxide

²⁷⁴ *Id.* (emphasis added).

²⁷⁵ See supra notes 44-75 and accompanying text.

²⁷⁶ See supra notes 158-81 and accompanying text.

²⁷⁷ Special Message to the Congress: Protecting Our Natural Heritage, [1967] 1 PUB. PAPERS at 93-94. In this regard, Johnson noted:

Congress' consideration six overarching national proposals for reform. In introducing his plans, President Johnson employed language of political urgency noting that "the pollution problem is getting worse;" that "[w]e are not even controlling today's level of pollution;" that "[t]en years from now, when industrial production and waste disposal have increased and the number of automobiles on our streets and highways exceeds 110 million, we shall have lost the battle for clean air—unless we strengthen our regulatory and research efforts now." 280

President Johnson expressed several air pollution proposals to Congress. First, he contended that "emission control levels should be set for those industries that contribute heavily to air pollution." Second, the President

pollution from coal and oil burning, and on pollution from motor vehicles.

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Id
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²⁷⁸ *Id.* at 94.

Today, no such [emission control] levels exist. Industries do not know to what extent they should control their sources of pollution or what will be required of them in the future. Strong State and local standards—essential to pollution control—cannot be effective if neighboring States and cities do not have strong standards of their own. Nor can such local standards gain the support of industry and the public, unless they know that plants in adjoining communities must also meet standards at least as strict.

We need the means to insure comparable emission levels for a given industrial source of pollution throughout the country.

I recommend that the Air Quality Act of 1967 authorize the Secretary of [HEW] to:

Designate those industries in interstate commerce that are nationally significant sources of air pollution.

Develop and publish industry wide emission levels in consultation with the industry concerned.

Provide each State the opportunity to adopt equivalent levels—or stricter ones.

Apply the Federal levels in those States which do not adopt their own.

The levels will establish pollution limits that a given industrial plant may not exceed—no matter where it is located. Our aim is to provide uniformity and stability in pollution control levels in cooperation with

²⁷⁹ *Id*.

²⁸⁰ Id.

²⁸¹ *Id.* (emphasis omitted). In particular, President Johnson stated:

urged that "regional air quality commissions should be established, to enforce pollution control measures in 'regional airsheds' which cut across State and local boundaries." Third, President Johnson suggested that "vehicle pol-

industry and local governments.

Special Message to the Congress: Protecting Our National Heritage, [1967] 1 PUB. PAPERS at 94.

²⁸² *Id.* at 94-95 (emphasis omitted). President Johnson provided the following details to support his airshed proposal:

Winds carrying waste gases have no respect for man-made political boundaries. The question we must answer is: shall we, the victims of pollution, hinder our fight against it by concerning ourselves more with artificial boundaries than with our people's health?

Today, although many of our severest pollution problems involve more than one state jurisdiction, there is not a single effective interstate program in the Nation. Efforts to achieve uniform control activities among neighboring States and communities have failed, despite added Federal financial incentives.

Under the Clean Air Act of 1963, we have attempted to encourage States to develop effective regional control programs. The act offered three Federal dollars for every local dollar spent to develop and support regional interstate air pollution control programs. Despite this incentive, no effective regional programs have been developed under the Act.

Men and women in one community, where there are relatively strict control standards, must suffer each time the winds bring in the aerial refuse of another community, where the standards are weak or nonexistent.

. .

I recommend that the Air Quality Act of 1967 authorize the Secretary of [HEW] to— $\,$

- Designate those interstate areas where effective regional airshed pollution programs are needed, but do not exist.
- Establish, in consultation with the States and local communities affected, a Regional Air Quality Commission in each such area. Each Regional Air Quality Commission would include two persons from each State involved, and one Federal official appointed by the Secretary of [HEW].

The commissions would establish regional air quality levels which would build upon the nationwide levels for major sources of air pollution, including industrial sources. The levels would encompass the entire pollution problem in a regional airshed—from waste burning and motor vehicle engines, as well as from industry. In every case, the commissions will give due regard for the economic and technical feasibility of achieving adequate pollution control.

lution control devices, required on 1968 model cars and in years to come, should be inspected on a regular basis by the States, with Federal assistance to initiate State inspection systems."283 Fourth, Johnson expressed the need to "take steps to improve our enforcement procedures," in the face of the "long delays between hearings, findings, and the completion of enforcement proceedings" under the existing federal air pollution procedures. ²⁸⁴ Fifth, the President claimed that "research in fuel additives must be accelerated." 285 Finally, President Johnson asserted that "our efforts to understand and control air pollution must be intensified and broadened."286 In this regard, President Johnson acknowledged that, given the economic importance of industry and automobiles, the national problem of air pollution needed to be approached "with respect for its complexity and its economic implications." Yet, President Johnson went on to note that "the health of our people, and indeed the health of the whole urban and rural environment, also require us to approach the pollution problem with urgency and tenacity."²⁸⁸ To do this, President Johnson urged increased federal funding as part of "a wide-ranging research effort, involving government, private industry, universities, and independent research groups,"289 with research priorities focused on emissions from motor vehicles, diesel engine smoke and odors, alternative motor vehicle engines, sulfur dioxide pollution, and low sulfur fuels.²⁹⁰

Id. at 95 (emphasis omitted).

²⁸³ *Id.* at 95 (emphasis omitted). President Johnson expounded on his proposal by observing that: "If a car's brakes—and its steering wheel, horn, turn signals, and lights—should be inspected periodically to protect against bodily injury, then surely its exhaust control device should be examined as well." *Id.* at 96. He continued by urging: "In 1965, the Congress made the determination that such devices were required to protect the public health. The time has come to take the next step. We should insure that these antipollution devices continue to function properly during the useful life of the car." *Id.*

²⁸⁴ Special Message to the Congress: Protecting Our National Heritage, [1967] 1 PUB. PAPERS at 96.

²⁸⁵ *Id.* (emphasis omitted). In this regard, President Johnson stated: "We simply do not know what public health price we are paying for the economic benefits we gain from fuel additives." *Id.* Accordingly, he recommended a program of research on the contribution of fuel additives to air pollution. *Id.*

²⁸⁶ *Id.* (emphasis omitted).

²⁸⁷ *Id.* at 97.

²⁸⁸ Special Message to the Congress: Protecting Our National Heritage, [1967] 1 PUB. PAPERS at 97.

²⁸⁹ *Id*.

²⁹⁰ *Id*.

In closing his remarks on air pollution, President Johnson waxed philosophical. He stated:

The government's relationship with private industry in this field should not be one merely of regulator and regulated. Pollution affects the lungs and eyes of worker, manager, owner, and government servant alike. The air cannot be divided into convenient shares. It is indivisible—and either clear and beneficial—or fouled and dangerous for all of us. Out of personal interest, as out of public duty, industry has a stake in making the air fit to breathe. An enlightened government will not only encourage private work toward that goal, but join and assist where it can.

America's air pollution problem emerges from our success as a modern nation. Sources of pollution may be environmental villains—but they are also social and economic necessities. Our task is to determine how to abate the poison they pour upon the air, without seriously diminishing the benefits they provide. Surely this is not beyond the capacity of a great nation's productive and scientific genius. Clearly, it is an absolute necessity for the health of the American people.²⁹¹

After his extensive discussion of the growing national problem of air pollution, ²⁹² President Johnson's message discussed the topics of "Highway Safety and Beauty," ²⁹³ "Developing Our Resources," ²⁹⁴ "Water—Abundant

²⁹² See supra notes 272-91 and accompanying text.

²⁹¹ *Id*.

²⁹³ Special Message to the Congress: Protecting Our National Heritage, [1967] 1 PUB. PAPERS at 98-100. Amazingly, President Johnson reported that: "[w]ith the cooperation of all levels of government, we are moving toward our objective to make beauty part of the daily life of every American." *Id.* at 98.

²⁹⁴ *Id.* at 98-100. Before providing detailed suggestions to Congress on various energy and resource possibilities, Johnson used lofty rhetoric to introduce his thoughts:

This continent is an abundance, continually being discovered and developed—sometimes wastefully, more commonly now with prudent foresight.

Much of its richness still lies hidden or unused. Untouched mineral resources lie beneath the American topsoil. Food, minerals, and fresh

and Pure,"²⁹⁵ "the Endowment of Nature,"²⁹⁶ and "Protecting Our Natural Heritage."²⁹⁷

water lie untapped within and beneath the oceans off our shores. The economic use of subsurface space is still beyond our powers.

The time has come to:

- Encourage the development of power from geothermal steam springs on Federal lands;
- Increase our scientific knowledge of the sea's resources;
- Develop rapid excavation techniques, to reduce the cost of underground construction;
- Examine our non-fuel minerals needs;
- Strengthen our ability to answer broad energy policy questions.

Id. at 8.

²⁹⁵ *Id.* at 100-01. Johnson observed that: "[a]s our population increases, our cities grow, and our industry expands, water becomes an increasingly precious resource." *Id.* at 100. Accordingly, he recommended legislation to establish a National Water Commission. *Id.* Trumpeting a river basin's approach to abating water pollution, President Johnson notified Congress that during 1967 the Secretary of Interior would review state water quality standards, encourage river basin water pollution abatement strategies, support advanced water treatment technologies, and explore economic incentives for water pollution control. *Id.* at 101.

²⁹⁶ Special Message to the Congress: Protecting Our National Heritage, [1967] 1 PUB. PAPERS at 101-02. Johnson urged Congress to act on his proposals for park acquisition, wilderness area designation, a scenic rivers and trails program, and national recreation areas acquisition. *Id.*

²⁹⁷ *Id.* at 102-03. In closing his multifaceted Message, Johnson stated:

There is much to be done. And we are losing ground. The air and water grow heavier with the debris of our spectacular civilization. The domain of nature shrinks before the demands of commerce.

We can build, for a time, a rich nation surrounded and permeated by poisoned elements. By ignoring the poisons, or by treating them in a casual, piecemeal way, we can endure in their midst for decades.

But here in America, we started out to do more than simply endure. We intended to live as men should live, working hard, raising families, learning, building—and breathing clear air, swimming in clear streams, finding a part of the forest or the shore where nobody else was.

If we are to have that America, we shall have to master the consequences of our own prosperity—and the time to begin is now.

2. Muskie's Leadership in Seeking Cleaner Air and Water During 1967

In January of 1967, Senator Muskie published an article in the journal, American County Government, entitled Pollutors Beware. 298 This theme was to be developed by Muskie in his legislative activities during the remainder of the year. In January, Muskie provided notice of "automotive air pollution field hearings" scheduled by his Subcommittee on Air and Water Pollution to be held later in the year.²⁹⁹ Reacting to President Johnson's January Message,³⁰⁰ Muskie characterized the Subcommittee's air pollution field hearings as consistent with the President's proposals.³⁰¹ However, he criticized the Johnson Administration's proposed water pollution control budget for the next fiscal year in remarks on the floor of the Senate in late January, 302 asserting that the Johnson proposal "grossly underestimates the costs associated with the water pollution control needs of this country."³⁰³ Moreover, in a letter to Public Works Committee Chairman Jennings Randolph of West Virginia, Senator Muskie urged that Randolph authorize the Subcommittee on Air and Water Pollution to investigate a water management program operating in the Ruhr District of West Germany which utilized effluent fees or taxes, because the Johnson Administration had expressed interest in proposing a similar approach for the United States, and Muskie was concerned that Congress have appropriate information on this matter, equal to the Executive Branch's information. 304 Randolph approved Muskie's request. 305

²⁹⁸ Edmund S. Muskie, *Pollutors Beware*, AMERICAN COUNTY GOVERNMENT, Jan. 1967, at 17.

²⁹⁹ Press Release, Office of Sen. Edmund S. Muskie (Jan. 12, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 812-4).

³⁰⁰ See supra notes 271-97 and accompanying text.

³⁰¹ Muskie Acts on LBJ Call: Pollution Hearings Set Next Week, PORTLAND PRESS HERALD, Jan. 31, 1967, at 1.

³⁰² 113 CONG. REC. 1,609 (1967) (statement of Sen. Muskie).

³⁰³ *Id.* In January, Muskie made a statement on the floor of the Senate in support of S. 20, a bill to establish a National Water Commission. Sen. Edmund S. Muskie, Remarks to the Senate (Jan. 30, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 637-2).

³⁰⁴ Letter from Sen. Edmund S. Muskie, to Sen. Jennings Randolph (Jan. 24, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 820-1). Catering to Randolph's interest in research on sulphur extraction research from flue gases, Muskie mentioned in his letter that an additional benefit of a Subcommittee trip to Europe would be "a tour of sulphur extraction processes which are being developed in England and

At the beginning February, Senator Muskie received a memorandum from the Subcommittee on Air and Water Pollution's Staff Aide, Leon G. Billings, which discussed a proposed schedule of Subcommittee hearings for the next several months. 306 Billings provided several points of candid advice to Muskie. First, Billings indicated that "most of [the proposed Subcommittee] hearings [would] relate in some way to the [proposed] Air Quality Act of 1967 [S. 780],"³⁰⁷ and that this bill was "obviously going to be controversial "308 Second, the Billings memorandum suggested that Subcommittee hearings on air pollution should start in early February with the H.E.W. Secretary and the President's science advisor being "requested to generally discuss the proposal of the President, its ramifications, its intent, and its effect." Third, Billings suggested that a few hearing dates be set aside in early spring to "give all interested parties an adequate opportunity to analyze exactly what the Administration has proposed, especially from a legal point of view;"³¹⁰ Billings went on to opine that "by that time, because of the information we [the Subcommittee staff] will have obtained during the field hearings, we will be in a better position to discuss this proposal with the Administration."311 Fourth, the Billings memorandum recommended that Muskie schedule several dates in early summer, after a planned Subcommittee trip to Europe, "to hear all parties interested in [the air quality]

Germany." Id. at 3. Randolph had expressed an interest, in a letter to President Johnson, of national emphasis "on research and development directed toward achieving substantial breakthroughs in the technology of entrapment and possible recovery of sulphur in the stacks, especially those of the coal or oil burning electric generating plants." Letter from Sen. Jennings Randolph, to Pres. Lyndon B. Johnson (Jan. 16, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 820-8).

³⁰⁵ Letter from Sen. Jennings Randolph to Sen. Edmund S. Muskie (Jan. 30, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 820-1). ³⁰⁶ Memorandum from Leon G. Billings, Staff Aide to the Senate Subcomm. on Air & Water Pollution, to Sen. Edmund S. Muskie (Feb. 1, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 811-7). ³⁰⁷ *Id.* at 1.

³⁰⁸ *Id*.

³⁰⁹ *Id.* The memo continued to mention that "[c]oupled with this [testimony] will be, of course, the presentation by the Weather Bureau and the Division of Air Pollution on the relation of weather to air pollution." Id.

³¹⁰ *Id.* at 2.

³¹¹ Memorandum from Leon G. Billings, Staff Aide to the Senate Subcomm. on Air & Water Pollution, to Sen. Edmund S. Muskie (Feb. 1, 1967) at 2 (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 811-7).

legislation including other Federal agencies, state and local governments, public interest groups, and private industry,"³¹² observing that "[b]y this time we may have obtained some additional information on what is being done regarding [air pollution control] in Europe"³¹³ and that "we will have had an opportunity at a staff level to talk to those affected by the legislation; and we will have had an opportunity to begin to redraft the legislation."³¹⁴ In an astute closing section of the memorandum entitled "Justification," Billings provided the following trenchant political advice to Senator Muskie:

To schedule [air pollution] hearings too quickly would undoubtedly invite outright potential fanatical opposition from certain sectors of the economy. [Moreover], unless there is some firm indication as to what the House Committee plans to do regarding this legislation, it would seem inadvisable to rush too rapidly into action. Last year's water pollution fight [during 1966], when the Senate had a strong bill and the House a weak one, was indicative of the potential situation which we might face should the Senate act first. On the other hand, we have strong justification for delaying any action until after the European trip, which will give the White House an opportunity to build pressure on the House for passage of strong legislation.

Finally, if the hearings are to be an effective means of obtaining reasonable reaction to the measure, sufficient time should be allowed to avoid unnecessary polemic.³¹⁵

There are several major questions on which the Subcommittee needs information: (1) progress and problems associated with automobile emission control devices which will be required on all 1968 model cars sold in the United States and which have been installed on all cars sold in California since fall of 1965; (2) problems associated with inspection and maintenance of these devices; (3) other auto exhaust emission[s] for which

³¹² *Id*.

³¹³ *Id*.

³¹⁴ Id.

³¹⁵ *Id.* at 2-3. See also an undated document entitled *Briefing Paper* that personally was prepared or approved by Billings before being transmitted to Muskie in early February of 1967. Briefing Paper (undated) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 812-1). Focusing on proposed Subcommittee hearing dates in February, the "areas of inquiry" section stated:

During the remainder of February, Senator Muskie presided at Subcommittee air pollution hearings in Washington, D.C., as well as in other cities. In Subcommittee hearings held on February 8, HEW Secretary John W. Gardner expressed criticism of industrial efforts at air pollution control to date, saying that he was unimpressed by state and local governmental air pollution initiatives.³¹⁶ That same day, Office of Science and Technology deputy director Ivan L. Bennett, Jr. testified that effective air pollution control technology already existed but had not been fully utilized; Bennett went on to note the harmful effects that air pollution had on humans and on plants and animals, opining that "while absolute cause and effect could not be established in any case, 'we cannot wait until we have absolute and elegant proof before initiating action programs."317 In Los Angeles, Muskie's Subcommittee was told of problems associated with antipollution devices installed on 1966 and 1967 vehicles and also heard the opinion of Louis J. Fuller, director of the Los Angeles Air Pollution Control District, who said that testing of the efficacy of anti-pollution devices by "averaging random samples of automobiles at the factory" was inappropriate and a "clear evasion' of the law "318 At the start of the Subcommittee hearing in Detroit on February 21, Senator Muskie noted that the Subcommittee was completing "a series of four field hearings which have taken us from Los Angeles to Denver and St. Louis." Significantly, in strong language, Muskie took the American automobile industry to task, stating:

There has been an attempt to discredit both the requirement for automotive pollution control devices and the need for such devices. I would like to set that argument to rest.

Automotive air pollution exists.

standards may be promulgated; (4) institutional mechanisms which might effectively deal with interstate pollution problems; (5) the relationship of air pollution to meteorological conditions; (6) the technological requirements to effectuate control of air pollution; and (7) the purpose and intent of the President's proposed Air Quality Act of 1967.

³¹⁶ 23 CONG. QUARTERLY SERV., CONG. QUARTERLY ALMANAC: 1967, at 879 [hereinafter 1967 C.Q. ALMANAC].

³¹⁷ *Id*.

³¹⁸ *Id*.

³¹⁹ Sen. Edmund S. Muskie, Opening Statement for the Subcomm. on Air & Water Pollution Hearings on Air Pollution 1 (Feb. 21, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 812-2).

According to the Public Health Service every city in the United States with a population of 50,000 or over has a motor vehicle pollution problem.

Whether or not the industry and their media wish to continue to claim that "only a few cities" are confronted with automobile associated pollution, the facts are that we have a national problem today; it is getting worse; and by the time all cars have devices there will be such a rapid growth in the number of cars not even the 1968 standards would reduce air pollution emanating from automobiles.

The time for delay has passed. We cannot be satisfied with devices which "almost" meet the standards.

If the automobile industry wishes to continue to sell cars in the major metropolitan areas of the United States for intraurban transit use, the industry must develop a clean car. If that clean car is to be powered by an internal combustion engine, then the emissions from that engine must be 99 and 44/100's per cent [sic] pure. On the other hand, if the "clean" gasoline powered car is impossible, the future of our cities will demand an alternative to internal combustion.

It has been suggested that control of automobile pollution is a "hoax," and that that hoax has been perpetrated by the Congress of the United States.

Let us not confuse the issue. The automobile industry has known for nearly 15 years [since 1952] that automobiles contribute to air pollution. The industry has also known that if their sales predictions were accurate, the situation without controls could only worsen.

Yet until California acted, little was done. Now the Nation has acted. The people of the United States demand clean air.

The Congress in 1965 did not act precipitously. The Congress did not tell the automobile industry how to design its engines. The Congress acted prudently on the advice of public health officials and pollution control officials on desirable interim automotive emission standards. The Congress accepted the assurances of the industry that it was capable of meeting the standards within the time limits

projected in the legislation.

The questions before us today are—can the industry meet today's standards today—is it prepared to meet more stringent standards in the near future—is it ready to make positive proposals of its own—or must the Congress force the issue and seek other alternatives.

I am anxious to hear the report of the industry today.³²⁰

At the February 1967 Subcommittee field hearing in Detroit, Thomas C. Mann, president of the Automobile Manufacturers Association and former Under Secretary of State for Economic Affairs, testified that he thought the federal standards for 1968 model year vehicles were reasonable and practical; saying that "a series of stated goals, projecting what will be required of the industry as far ahead as 1975 or 1980," would help the industry to concentrate its research and development on specific problems."³²¹ This answer "prompted Muskie to say that the industry had 'changed (its) attitude' on air pollution."³²²

In March, Senator Muskie, as Chairman of the Subcommittee on Air and Water Pollution, joined with Senator Warren G. Magnuson (D.-Wash.), Chairman of the Commerce Committee, in initiating "five days of public hearings on the possibility of developing electric vehicles to [help] reduce [air] pollution [from] automobiles." Earlier in the year, in remarks on the Senate floor, Muskie told his colleagues that he joined with Senator Magnuson of Washington in co-sponsoring Senate bills 451 and 453, for research on non-polluting vehicles, 324 noting that "[t]he serious air pollution situation in New York City [in November of 1966] dramatically illustrated what our cities may be facing in the future if an alternative to the [internal]

³²⁰ *Id.* at 4-5.

³²¹ 1967 C.Q. ALMANAC, *supra* note 316, at 879.

³²² *Id.* The 1967 C. Q. Almanac records February 20, 1967 as the date of this exchange. *But see* notes 312-13 and accompanying text (Feb. 21 date indicated). At the Detroit hearings, Harry F. Barr, vice president of General Motors Corp. contended that 1968 GM model devices would reduce emissions by approximately sixty percent—enough to meet federal standards. Barr argued, however, that more research would be necessary to meet the ambitious 1970 California goal of an eighty percent reduction. 1967 C. Q. ALMANAC, *supra* note 316, at 879.

³²³ 1967 C. Q. ALMANAC, *supra* note 316, at 880.

³²⁴ 113 CONG. REC. 612 (1967) (statement of Sen. Muskie).

combustion engine is not developed."³²⁵ At the start of the joint hearings in March, Muskie considered implications far into the future and opined as follows:

The hearings which we begin today are significant in two ways. First, the problems of urban America are so complex and so interrelated that there is no single approach to any problem. Second, they recognize the real need for the Congress and its respective committees to sit down together in an attempt to ascertain both present and future needs of the human environment

I have long felt that an electric automobile or a fuel cell automobile or any other kind of automobile which differs radically from those we use today could not alone be justified as a response to the problem of air pollution. The fact that the Nation's cities are snarled by excessive numbers of cars, that the people of our Nation's cities are inhibited in their freedom of movement by cars which are too large or highways that are too small, are reason enough to turn our thoughts, research

Since introduction of legislation last year by Senator Magnuson and myself, there has been a great deal of publicity devoted to the development of alternatives to internal combustion, especially the electric automobile. The major automobile manufacturers suddenly revealed that they had for some time been carrying on research into practicable means of propelling automobiles by a power source other than the internal combustion engine. The Journal of the American Medical Association in a recent editorial endorsed the concept of the electric automobile. Scientific journals, the daily press, virtually every type of publication, and the mass media have devoted increasing attention to this concept.

A poll which was published by George Gallup, on January 7, 1967, indicated that an electric automobile would be purchased by millions of Americans. . . .

This poll is indeed a recognition of a national need and a public willingness to purchase what this legislation might help to develop. I am convinced that we must act now, that we must be prepared to accept the eventual elimination of the presently designed automobile engine in our major metropolitan areas [and] that we must, in fact, be fully prepared to change our entire concept of moving from place to place.

³²⁵ *Id.* at 613. Muskie went on to observe in these January 1967 remarks:

capabilities and our industrial mechanism to development of different ways to move people. Air pollution control should be a consideration of any such endeavor.

I do not offer a panacea. I suggest, however, that we begin to consider a transportation system which will serve us well in the year 2017, not just in the year 1977 or 1987. Part of that transportation system must include, I am convinced, a clean car—that is, a car which does not pollute our urban environment.

I have said before that we have spent billions of dollars to allow man the privilege of walking on the Moon, but we have spent little . . . to insure his right to move freely on the Earth.³²⁶

In contrast to Muskie's enthusiasm for alternative automobile research, "[t]estimony at the hearings revealed that both the Administration and the major automobile manufacturers opposed federal support for electric vehicle research, although the bills were favored by representatives of smaller firms which specialized in electric vehicle research and development."³²⁷

On March 18, the United States and the world community were shocked by the "'tragic harm' to wildlife" and the economic loss caused by the wreck of the oil tanker, *Torrey Canyon*, off the coast of France.³²⁸ During that same month, Senator Muskie received a report from the Federal Water Pollution Control Administration entitled *A New Era for America's Waters*.³²⁹

³²⁶ Sen. Edmund S. Muskie, Opening Statement at Joint Hearings of Senate Comms. on Commerce & Public Works on S. 451 & S. 453, at 1-2 (Mar. 14, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 813-3). ³²⁷ 1967 C. Q. Almanac, *supra* note 316, at 880. However, note the mention of a "51-page advisory report," issued by President Johnson's Commerce Secretary, Alexander B. Trobridge, on Oct. 18, 1967, which recommended steps to abate automotive air pollution, including a recommendation for a five-year, sixty million dollar federal initiative to launch "innovative developments" regarding "new vehicle energy sources, propulsion systems and emission control devices, including development of special purpose and general purpose vehicles." *Id.*

³²⁸ *Id.* at 1008. A smaller "oil pollution episode," also, "fouled beaches on Cape Cod, Mass[achusetts]" in March. As a result of the Torrey Canyon wreck, on May 26, 1967 President Johnson asked for an "urgent" study of methods to "minimize the threat" of oil spills. *Id*.

³²⁹ Fed. Water Pollution Control Admin., Dep. of the Interior, A New Era for

In April, Senator Muskie's Subcommittee on Air and Water Pollution heard extensive testimony from, among other witnesses, Surgeon General William H. Stewart, on proposed air pollution control legislation. 330 Stewart discussed the mounting scientific evidence of the effects of air pollution on public health; he concluded that "although chronic illness was caused by 'an extraordinarily complex set of phenomena,' air pollution was 'clearly and unquestionably a factor' in the contracting of 'many diseases affecting . . . millions of . . . people." Accordingly, Surgeon General Stewart said that it was "imperative . . . to remove from the [] air now all the pollution within the range of feasibility."332 Stewart's testimony was lauded by Senator Muskie "who called it 'the strongest and clearest' statement of the relationship between air pollution and health which the Subcommittee had heard."333 In April, Senator Muskie also introduced Senate Bill 1646 in conjunction with an identical bill in the House of Representatives introduced by Rep. William F. Ryan (D.-N.Y.) "to accelerate construction of solid waste disposal facilities to reduce air pollution."334 As explained by Muskie in a statement he made on the floor of the Senate:

[T]he pollution of our environment falls [into] several major categories, all of which relate to the waste generated by production and consumption of goods. Over the past 5 years the Congress has moved decisively in these areas to assure that adequate Federal programs to meet and defeat these problems were developed.

Again this year the Congress has been called on to expand the war on air pollution. The President has proposed and the Senate Subcommittee on Air and Water Pollution is presently considering major amendments to the Clean Air Act.

Another area of equal importance must not be

AMERICA'S WATERS (1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 815-5).

³³⁰ 1967 C. Q. ALMANAC, *supra* note 316, at 879.

³³¹ *Id.* at 879, 881.

³³² *Id.* at 881.

³³³ Id

³³⁴ Press Release, Office of Sen. Edmund S. Muskie (Apr. 28, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 820-5).

overlooked. [This] is the need to improve our comprehensive program to dispose of the solid waste which society produces, sometimes as the byproducts of our efforts to control both air and water pollution.

Our phenomenal productivity is contributing to a waste disposal problem whose dimensions, already immense, are sure to increase markedly as both rates of production and population climb.³³⁵

Muskie's proposed Solid Waste Disposal Act Amendments of 1967 were intended, in his words, to avert "a solid waste disposal crisis "336 Noting that Congress, in the Clean Air Act of 1963, "gave its approval to the first Federal legislation directed at the problem of solid waste disposal,"337 and that the "Solid Waste Disposal Act of 1965 [launched] . . . a program of research and development aimed at finding and evaluating better methods of safely disposing of the solid wastes which Americans discard at a rate of 5 to 8 pounds per person per day,"338 Muskie urged his colleagues to substantially increase funding for research, development, and construction of better solid waste facilities throughout the United States. Moreover, during April, Muskie received a conservation award from the National Wildlife Federation for his leadership in enacting "landmark" national air and water pollution control legislation. 340

In May, Senator Muskie's Subcommittee on Air and Water Pollution heard testimony from several witnesses on Senate Bill 780, the Johnson Administration's proposed Air Quality Act of 1967.³⁴¹ Among the more interesting comments was a statement from a spokesperson from the National Wildlife Federation, who told the Subcommittee that "most people probably

³³⁵ 113 CONG. REC. 10,985 (1967) (statement of Sen. Muskie).

³³⁶ *Id*.

³³⁷ *Id*.

³³⁸ *Id.* at 10,985.

³³⁹ *Id.* at 10,986.

³⁴⁰ National Wildlife Federation Presents Annual Conservation Achievement Awards, SOAP & DETERGENT ASSOC. NEWSLETTER, Apr. 1967, at 1 (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 815-5).

³⁴¹ See 1967 C.Q. ALMANAC, supra note 316, at 881-82 (summarizing witnesses' May 1967 testimony).

can *exist* under trying conditions . . . of polluted air, but is this *living*?;"³⁴² an assertion by "[a] spokes[person] for 41 steel companies [who] opposed the establishment of national emission standards for air pollutants [noting that] standards should vary in different areas, depending on population density, topography and other factors;"³⁴³ and analysis by "Dr. Eric J. Cassell, professor at the Mt. Sinai School of Medicine in New York City, [who opined that] 'we must no longer allow the atmosphere to be used as a garbage can, without at least knowing the nature of the garbage,'"³⁴⁴ but who complained that "the practice of painstaking investigation of one air pollutant at a time 'through oversimplified research to support oversimplified legislation' should be replaced by a comprehensive approach to the problem."³⁴⁵

Muskie, and other senators on the Subcommittee on Air and Water Pollution received a technical background paper, in June, from the Subcommittee's staff, which summarized "the rationale for and the relationships between ambient air criteria, emission control requirements, and ambient air quality standards." The staff background paper observed:

There are four principal areas in which accelerated progress must be insured nationally if the abatement of air pollution is to be successfully implemented. They are[:]

- (1) the establishment of criteria of ambient air quality which describe the effects on health and welfare of varying concentrations of a contaminant . . . under different atmospheric conditions[;]
- (2) the setting of standards of ambient air quality based upon the air quality criteria considered most desirable;
 - (3) the development of plans for air regions, to implement

³⁴² *Id.* at 881. The spokesperson went on to note that "air pollution—like many conservation issues in the past—had turned into a great public question only after becoming so widespread and severe that 'expensive' remedies were necessary." *Id.*

³⁴³ *Id*.

³⁴⁴ *Id.* at 882

³⁴⁵ *Id.* "Because of the complex chemical interaction between specific polluting agents in the air, Cassell said, it was 'not reasonable or sound to legislate air pollution control by writing laws or standards for one pollutant at a time, out of the context of the whole." *Id.*

³⁴⁶ Memorandum from Richard B. Royce, Chief Clerk & Staff Director of the Subcomm. on Air & Water Pollution, to Subcomm. Members (June 19, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 813-5).

the emission controls required to achieve the desired ambient air standards after due consideration to our current technical and economic capability[;] and

(4) to provide the required stimulus to industry and government to improve control technology to the degree required to economically prevent and abate air pollution.³⁴⁷

Interestingly, the staff background paper provided an assessment on the relationship between "[a]ir quality criteria," which should "provide a realistic basis on which State and local pollution agencies can set their air quality standards" and "summarize what is known about the effects of pollution in the atmosphere on health and welfare," and "air quality standards [which] are an expression of public policy rather than scientific findings . . . influenced not only by a concern for the protection of health and welfare, but also by economic, social and technological consideration. However, under any circumstances health should be considered a minimum requirement." 349

June of 1967 also saw the release of a report entitled *A Strategy for a Livable Environment*, prepared by a task force constituted by the Secretary of HEW.³⁵⁰ Senator Muskie, responding to the document, wrote a letter to the HEW Secretary John W. Gardner in June, describing it as "a splendid and imaginative document which I hope can be implemented"³⁵¹ and also in-

³⁴⁷ Senate Subcomm. on Air & Water Pollution, Background Paper 1, Ambient Air Quality Criteria and Standards, (revised June 19, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 813-5).

³⁴⁸ *Id*.

³⁴⁹ Id

³⁵⁰ Task Force on Env'tl Health & Related Problems, Report to Secretary of HEW, A Strategy for a Livable Environment, (June 1967) (on file with the Edmund S. Muskie Archives, Bates College, Senate Series, Box SE 715-1) [hereinafter A Strategy for a Livable Environment].

³⁵¹ Letter from Sen. Edmund S. Muskie, to John W. Gardner (June 13, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 715-1). Interestingly, Ron M. Linton, the Chairman of the HEW Task Force and former staff director, under Chairman Muskie, of the Senate Subcommittee on Air and Water Pollution, had previously suggested in a June 1967 letter to Muskie's Administrative Assistant that "[a] letter from the Senator to the President endorsing the report and urging his support of Gardner's implementation would be most helpful." Letter from Ron M. Linton, to Donald Nicoll (June 9, 1967) (on file with the Edmund S. Muskie Archives, Bates College, Senate Series, Box SE 715-1).

dicating that he was "writing the President to indicate [his] enthusiasm for the report." The "Strategy" report contained some broadly focused discussion and analysis of the environmental challenges facing America in the final third of the Twentieth Century. Based on a series of conferences, informal meetings with experts, and review of extensive written documents, the HEW Task Force opined that "the environmental contamination Man creates, Man can correct, and that the Nation's industrial and technological genius needs to be brought to bear on this problem; "353 moreover, the HEW Task Force urged that "action cannot be delayed until all the answers or even better answers are available. Action must be taken on the knowledge and technical capability now possessed while continuing to seek better answers." "354

The HEW Task Force's *Strategy* made numerous interesting points. First, according to the HEW Task Force, the "danger to environmental quality . . . [was] among the most important domestic problems," since "[i]t affects all Americans where they live, work, and play," and "[i]t can materially damage their children and generations yet unborn." Second, the *Strategy* contended, "[w]hat is needed now is an overview of the entire question of environmental health and its interrelated components, not only obvious

American affluence today contaminates the Nation's air, water, and land faster than nature and man's present efforts can cleanse them.

But of even greater concern, experience has shown that undetected environmental health hazards, either alone or in conjunction with known hazards, can arise suddenly to create conditions of living harmful if not dangerous to the public. It is necessary then that a constant effort be made to detect these hazards before they reach the crisis stage. But, while we must be alert to the effects of new hazards, continuing effort also must be expanded to learn more about known hazards so that they can be controlled.

We know something of air pollution, but we know little about the hazard potential of 500,000 to 600,000 synthetic chemicals and other compounds on the market today. We know something of water quality, but little of the effects of trace metals. Can we cope with solid waste? What is the future problem of nuclear waste?

³⁵² Letter from Sen. Edmund S. Muskie, to John W. Gardner (June 13, 1967) (on file with the Edmund S. Muskie Archives, Bates College, Senate Series, Box SE 715-1).

³⁵³ A Strategy for a Liveable Environment, *supra* note 350, at ii.

³⁵⁴ *Id.* at ii-iii.

³⁵⁵ *Id.* at vii. The first three paragraphs of the "Summary" portion of the document, in almost quaint language viewed from a modern perspective, stated:

problems of water pollution, air pollution, and solid wastes, but, also, noise, crowding, radiation, traffic safety, and ailments which can be related to these lesser known factors." ³⁵⁶

Third, the HEW Task Force observed, in compelling and prescient rhetorical terms:

As the facts become clear, the public will be shocked at the price it is paying for its affluence. But, if it is obvious that one way to halt the contamination of the environment is to prohibit automobiles, stop the generation of electricity and shut down industry, it is just as obvious that this way is impossible. What is possible is to find ways to eliminate contamination at its source. Or, next best, to capture a pollutant and use it in a non-harmful way; or, finally, to bring the level of pollution down to a point compatible with the requirements of human health and welfare.³⁵⁷

Fourth, in a related way, the *Strategy* "call[ed] for a basic [national] policy which accepts the principle that environmental contamination be treated as a community disease, that the effects of this disease on man are mental as well as physical, and encompass the aesthetic . . . [and] material values of life."³⁵⁸

Fifth, the HEW Task Force delineated "ten action goals . . . which . . . deserve[d] the highest priority [as of 1967]." A summary of these ten national goals—in general and sometimes abstruse prose—was provided in the *Strategy* in the following language:

- [1] Air pollution has reached a point where abatement is the principal effort required. But it needs to be accompanied by a greatly stepped-up developmental research program.
- [2] Urban contamination is being compounded so rapidly that broad environmental criteria and standards are needed. Yet, too little is known to permit the develop-

³⁵⁶ *Id.* at viii.

³⁵⁷ Id

³⁵⁸ A Strategy for a Livable Environment, *supra* note 350, at ix.

³⁵⁹ *Id.* at xi.

- ment of criteria and standards on such problems as health effects of a super-highway cutting through a crowded urban area, the mental stresses generated by traffic jams, or the effect of sonic booms on major population areas.
- [3] Waste disposal is a major governmental activity. But it is no solution to shift contamination from the ground up into the air through smoke. There must be a total look at all waste disposal, including nuclear waste disposal.
- [4] Population problems compound all other environmental threats to man.
- [5] Materials, metals, and chemicals in ever-increasing abundance and complexity come to the market place with no previous analysis of their toxic effect upon the environment. This cannot be permitted to continue.
- [6] Consumer protection against dangers from household equipment and appliances is necessary in a world where technology is advancing at a tremendous pace. Further, with so many food products being subjected to chemical processing before they reach the mouth, bold new efforts are necessary to assure public safety.
- [7] Radiation hazards, in spite of the amount of public sensitivity to the subject during the past quarter century, are still in need of improved control. Even today, more uranium miners are over-exposed to radiation and are likely to die prematurely. Clearly, more protection is needed.
- [8] The occupational illness and safety protection goal for workers focuses concern on the work-place environment Even this comparatively manageable environment is now controlled by safety protection for less than 20% of the work force.
- [9] Water quality is at a shocking level for the wealthiest Nation in the history of the world. About one-third of the 19,200 communities in the United States which have municipal water systems fail to meet existing Public Health Service standards. But, to compound the problem, it is not certain that the present standard is

meaningful.

[10] Physical and mental health standards for the urban environment do not exist [as of 1967]. The Task Force believes that not only should [HEW] identify the (1) permissible, and (2) practical levels of these environmental insults which concentrate in urban areas, but it should also encourage other Federal agencies . . . to conform to these standards in the implementation of their own programs. Likewise, full cooperation in the achievement of standards should be encouraged by State and local governments and private groups and individuals.³⁶⁰

On a more spiritual note, in June, Senator Muskie received a copy of a sermon preached in the Washington Cathedral by Canon Michael Hamilton, entitled *Air and Water Pollution—A New Moral Problem*,³⁶¹ which Muskie indicated he would insert into the *Congressional Record*.³⁶² The sermon quoted scripture, "And I brought you into a plentiful country, to eat the fruit thereof and the goodness thereof; but when ye entered, ye defiled my land, and made mine heritage an abomination," Jeremiah 2:7,³⁶³ as well as comments by federal governmental officials, including an April 1967 speech by Muskie.³⁶⁴ Characterizing pollution as an ancient problem, the sermon noted as follows:

When Jeremiah inveighed against the Israelites for defiling the land of Palestine into which they had come, he did so because many of them had turned from the worship of Jahweh to the worship of Baal, the God of the Canaanites.

³⁶⁰ *Id.* at xi-xiii.

³⁶¹ Canon Michael Hamilton, Sermon at Washington Cathedral, Air and Water Pollution—A New Moral Problem (May 28, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 816-1) [hereinafter Hamilton Sermon]; *see* 113 CONG. REC. 17,419 (1967).

³⁶² Letter from Sen. Edmund S. Muskie, to Rev. Michael Hamilton (June 20, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 816-1). ³⁶³ Hamilton Sermon, *supra* note 361, at 1.

³⁶⁴ *Id.* Indeed, in closing the sermon, Hamilton stated: "Men like Senator Edmund S. Muskie from Maine . . . who have done so much for the cause of combating pollution on the Federal level, must be given national recignition [sic] and political support." *Id.* at 6.

This idolatry was described as a defilement of the land. There was an immediate connection in the minds of the Jews between man and his environment, a relationship of responsibility between man, God, and the natural world which God had created for man's welfare. To sin spiritually had the effect of defiling the good earth. To misuse the land was an offense against God.

Pollution, of course, was an ancient problem. Before the Israelites lived in their tents and developed a meticulous sanitation code for both religious and health reasons, prehistoric man had smoke problems when he lit bonfires in his cave. In the Middle Ages in London, there were restrictions on the burning of some kinds of fuel and in 1306 a coal merchant was hung for violating them. In our century it has been the poor, living "on the other side of the tracks", [sic] who were exposed to pollution and the suffering it causes. Today it is an issue for all of us.³⁶⁵

Yet, the sermon went on to point out the modern moral imperative of pollution:

Now why should one presume to preach on pollution? It is not the Gospel message, for it is about the salvation of our bodies, not of our souls. A lecture could be delivered on this subject by a Jew, a Moslem or a twentieth century Humanist The Church has no answers to the technical questions involved, and no priest is given scientific wisdom on this matter because of his ordination However, there are compelling reasons which . . . occasionally justify a minister speaking from a Cathedral pulpit on this kind of topic. Firstly, because decisions which include elements of moral responsibility as well as technical choices have to be made. Secondly, because God is concerned about the health of man, as Christ clearly showed in his healing ministry on earth, and we as churchmen should share that concern in relation to the hazards of pollution. Lastly, when we preach . . . we should also teach

³⁶⁵ *Id.* at 2.

the attitude toward Nature which is reflected in [the] Gospel.³⁶⁶

In June, Senator Muskie opened three days of Subcommittee hearings on oil pollution.³⁶⁷ He observed that "the *Torrey Canyon* [oil tanker] disaster highlighted the need to give increased attention not only to the assurance of recovery of damages but to better methods to prevent those damages from occurring. The latter point obviously includes better practices on the part of the shipowners and operators."³⁶⁸ Moreover, in June, Muskie received a thoughtful five page letter on the policy issue of tax incentives for air and water pollution control expenditures by private industry, from United States Secretary of the Treasury Henry H. Fowler.³⁶⁹

³⁶⁷ Sen. Edmund S. Muskie, Opening Statement at Subcomm. on Air & Water Pollution Hearings on S. 1591 and S. 1604—to Amend the Oil Pollution Act of 1924 (June 7, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 819-3). These hearings continued on July 13 and August 17, focusing on broader issues of lake and acid mine water pollution. 1967 C.Q. Almanac, *supra* note 316, at 1006. ³⁶⁸ Sen. Edmund S. Muskie, Opening Statement at Subcomm. On Air & Water Pollution Hearings on S. 1591 & S. 1604—to Amend the Oil Pollution Act of 1924 (June 7, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 819-3).

³⁶⁹ Letter from Henry H. Fowler, Secretary of the Treasury, to Sen. Edmund S. Muskie (June 12, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 820-4) (responding to a letter request of Muskie of May 5, 1967). Among the letter's highlights were pro and con arguments on "whether general aid to industry is necessary and desirable." *Id.* at 1. On the con side, Fowler's letter noted, for instance:

In the past, the Congress has followed the policy that costs of alleviating social problems related to industry should be reflected in the costs of individual firms and industries. For instance, low-wage industries have had to increase their prices proportionately more as a result of the long-term increases in the minimum wage. At the State level, most unemployment compensation laws require industries with sharp seasonal or cyclical fluctuations to pay a higher than average tax rate in recognition of the social burden arising from such operations.

Id. at 2.

On the pro side, Fowler's letter considered the argument "that aid should be given to industry for pollution control costs [because] pollution equipment yields no financial return to the producers but is for the public benefit." *Id.* A prescient consideration of *pollution prevention* as opposed to *pollution control* incentives was contained in the following analysis by Fowler:

³⁶⁶ *Id*.

July was a busy legislative month for Senator Muskie, with his attention riveted on air pollution. In commenting on the release of the Senate Committee on Public Works report on Senate Bill 780³⁷⁰ Muskie noted that

Even if all firms are equally profitable and have equal pollution problems, accelerated depreciation or tax credits for pollution control equipment could be discriminatory and inefficient. So-called pollution control equipment is only one of three major methods of controlling pollution. The other two are changes in the quality of the raw materials used (including fuels) and changes in the process used. Industries, or firms, which use the latter two methods to meet their pollution control requirements would not benefit from tax provisions giving special benefits for pollution control equipment. In this connection I might cite as an example the recent newspaper report that certain electric utilities in the Pennsylvania-New York area have decided to use fuel with less sulphur content. Such fuel is more expensive than that now being used, but in this case the reduction in the sulphur dioxide released into the air will not be the result of expenditures for control equipment. Special tax credits or deductions for pollution control equipment also might, in some cases, tip the balance to the use of such equipment rather than changes in raw materials or processes, even though the latter two methods would be the more economical if the system of Federal assistance were neutral.

The desirability of having pollution control carried out in the most economical method available requires consideration of whether a method can be instituted which would provide industry with an incentive to abate pollution but leave individual firms free to adopt the least costly method for their circumstances.

Id. at 3. For a general background on the history of pollution prevention in the United States, see generally, Blomquist, *supra* note 69.

³⁷⁰ S. REP. No. 90-403 (1967). The report stated that:

The prime purpose of the proposed legislation is to strengthen the Clean Air Act, to expedite a national program of air quality improvement, and to enhance the quality of the atmosphere to protect the health and welfare of our citizens against long-term hazards and immediate danger. Considerations of technology and economic feasibility, while important in helping to develop alternative plans and schedules for achieving goals of air quality, should not be used to mitigate against protection of the public health and welfare.

Id. at 2. Moreover, the report noted, in pertinent part:

The objective of S. 780 as amended is to achieve clean air, and to do so through the establishment of sound objectives and feasible timetables. The committee's hearings indicated that those who contribute to air pollution share with all Americans the objective of cleaning up the air, and that the differences of opinion expressed were addressed primarily

this proposal "follow[ed] 18 days of hearings in Los Angeles, Detroit, Denver and St. Louis as well as Washington, and is the product of a concerted effort to represent national concern for effective control of air pollution."³⁷¹ On July 18—a few days after the publication of the Committee report on Senate Bill 780—Muskie, as floor manager of the bill, told his colleagues:

The Senate has demonstrated its recognition of air pollution as a serious national problem. Beginning with the Clean Air Act of 1963 the Senate has given unanimous approval to legislation designed to expand Federal support for the battle to preserve the quality of our air resources

[T]here is an abundance of compelling evidence to indicate that air pollution is a hazard to health. There is more compelling evidence to indicate that the public welfare is adversely affected by indiscriminate pumping of waste into

to how that objective best could be accomplished. Through a full understanding of the etiology, the probabilities, and the severity of health and welfare hazards involved and with the strengthening of the technological and economic capabilities for abatement in both the public and private sector of our economy, the needs of public health and welfare without serious or excessive economic dislocation can be met.

In recommending this bill the committee has taken into account the evidence developed in hearings and field studies and, as in the past, has attempted to expand upon the original draft legislation

The American people recognize the threat of air pollution, and they want action. Responsibility for the delays in developing an effective attack on the problem rests with industry, government at all levels, and the legislative processes.

This legislation contains imaginative and far-reaching opportunities for air pollution control and abatement, but the bill is complex, as are the problems of environmental control. The problem of air pollution is neither local nor temporary. It is a universal problem, and, so long as our standard of living continues to increase, it will be a permanent threat to human wellbeing

The Air Quality Act of 1967 . . . serves notice that no one has the right to use the atmosphere as a garbage dump, and that there will be no haven for polluters anywhere in the country.

³⁷¹ Sen. Edward S. Muskie, Statement to the Senate Regarding S. 780, the Air Quality Act of 1967 (undated) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 814-5).

the air. We know this as individuals who have experienced discomfort from foul odors, had our eyes burn from smog or looked at the color of a white shirt after a day in any of our industrial cities.

At the same time popular concern for air pollution control has risen dramatically as the result of increased leisure time, greater publicity, increased awareness of health problems and a variety of other reasons. There is a demand for action, and all the evidence received by the Public Works Committee this year in 18 days of hearings, in consultations and in research supports that demand.³⁷²

On July 18, the Senate passed Senate Bill 780 by a unanimous roll-call vote.³⁷³ Senator "Jennings Randolph (D W.Va.), chairman of the Public Works Committee, praised Muskie's leadership in air pollution control and called the bill 'the most significant step toward pollution abatement' in the nation's history."³⁷⁴ Moreover, Randolph contended that the emergency injunctive provisions of Senate Bill 780 were, "'the most significant enlargement' of existing powers contained in the bill."³⁷⁵ "In other comments,

The Committee recognizes the potential economic impact, and therefore economic risk, associated with major social legislative measures of this type. But this risk was assumed when the Congress enacted social security, fair labor standards, and a host of other legislation designed to protect the public welfare. Such a risk must again be assumed if the Nation's air resources are to be conserved, and enhanced to the point that generations yet to come will be able to breathe without fear of impairment of health.

S. 780 is a logical expansion of the Clean Air Act of 1963 as amended. In the basic act the Congress provided for development by the Public Health Service of "air quality criteria" to identify the effects of pollutants on health and welfare. To date, one such set of criteria relating to oxides of sulfur has been issued and the Committee understands that criteria on several other contaminants including carbon monoxide, particulates, and oxidants will be released within the next 6 months.

³⁷² 113 CONG. REC. 19,171 (1967) (statement of Sen. Muskie). Muskie continued, focusing on the potential risks and benefits of Senate Bill 780:

Id.

³⁷³ 113 CONG. REC. 19,186 (1967).

³⁷⁴ 1967 C.Q. ALMANAC, *supra* note 316, at 883; *see* 113 CONG. REC. 19,175 (1967).

³⁷⁵ *Id*.

[Senator] John Sherman Cooper (R Ky.) [claimed that] he had 'never seen . . . a better demonstration of the Committee legislative process than in . . . the consideration and development of this measure." 376

In August, Muskie was occupied by water pollution oversight hearings. ³⁷⁷ On August 9, Chairman Muskie opened the Senate Subcommittee on Air and Water Pollution hearings with the observation that "[w]hile [the] hearings [were] primarily 'oversight' in nature the Subcommittee is alert to the possibility that there may develop, during the testimony and discussion, areas in which [new] legislation is required." ³⁷⁸ In providing an overview of recent legislative activity, Muskie noted:

Since the passage of the 1965 Water Quality Act which set up the [Federal Water Pollution Control] Administration independent of the Public Health Service, the President has reorganized the water pollution control program into the Department of the Interior. Water quality standards, author-ized by the 1965 Act, must have been filed by the States with FWPCA by July 1 of this year [1967]. New research programs have begun in response to both the 1965 and 1966 [Water Pollution Control] Acts. Construction grants for waste

³⁷⁶ *Id.* In August, the House Interstate and Foreign Commerce Committee held hearings on Senate Bill 780 and House Bill 9509, the House companion bill. *Id.* at 884. During the House hearings, the witnesses essentially repeated the testimony that they had given before the Senate Air and Water Pollution Subcommittee. *Id.* On November 2, the House by a 362-0 roll-call vote passed Senate Bill 780 as slightly amended, and sent the measure on to conference with the Senate. *Id.* at 886; 113 CONG. REC. 30,999 (1967).

³⁷⁷ 1967 C.Q. Almanac, *supra* note 316, at 1008. Interestingly, in a television broadcast in July of 1967, just before Muskie conducted his water pollution oversight hearings, Edward P. Morgan highlighted water and air pollution in Texas as an example of inadequate environmental control measures in the nation as a whole. The apparent precipitating cause of his commentary was the completion by the Federal Water Pollution Control Advisory Board of a week long "on-the-spot inspection of pollution problems from Dallas to Brownsville" He started his broadcast with a two word summary: "Texas stinks." Edward P. Morgan, *The Shape of the News*, NEWSDAY, July 8-9, 1967 (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 817-2).

³⁷⁸ Sen. Edmund S. Muskie, Subcomm. on Air & Water Pollution Hearings on Water Quality Standards 1 (Aug. 9, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-8).

treatment facilities have been authorized on a much broader, and much fairer basis.

I think it fair to say that the focus of the water pollution control program was changed drastically by the Congress. We are here today to determine whether the product of that change is new or whether it is simply changed in form.³⁷⁹

Senator Muskie continued his opening remarks on the water pollution oversight hearings by identifying a number of areas of concern in the implementation of federal water pollution control legislation. Among the matters that he raised were the following:

The fact that, during the time when a maximum effort was required, FWPCA was forced to change agencies, re-staff to replace Public Health Services officers who chose not to move, and gear up for a vastly expanded program, undoubtedly had a negative effect on the forward movement of the program.

But the Congress provided that Water quality standards had to be filed . . . by July 1 of this year. And the Congress provided the [federal government] with authority to set standards if the States fail to act. We must now determine the extent to which the States have acted, the extent to which they were assisted in carrying out their obligation and the basis on which the Secretary plans to determine whether or not the standards and plans that the States have filed will be approved.

The Water Quality Act of 1965 gave the States the broadest possible latitude in determining the uses to which they wished to put the interstate streams within their borders. The Secretary on the other hand was given authority to determine whether or not the uses determined by one State were . . . in conflict with other States sharing the same streams and to determine whether or not the plans for implementation of standards were sufficient as to method and time

³⁷⁹ *Id*.

The Committee must also be concerned with the extent to which previous enforcement experience was taken into consideration in the standards approval process. There have been 41 abatement conferences held since 1957 most, if not all, of which have resulted in recommendations for remedial action in the form of plans for implementation of pollution control.

These abatement activities should provide a legitimate basis on which to determine the adequacy of plans for implementation of water quality standards. The review procedure therefore should include an analysis in terms of those conference recommended schedules.³⁸⁰

Secretary of Interior, Stewart L. Udall, testified that he had approved water quality standards which "call for a minimum of secondary treatment for all municipal wastes and a comparable degree of treatment for industrial wastes," with the only exception being certain coastal waters. Moreover, Udall informed Muskie's Subcommittee that instead of rejecting proposed state water quality standards as inadequate, the Department of Interior planned to critique inadequate submissions and provide states with an opportunity to file revised standards. Secretary Udall also delineated what he called "[t]he second and continuing phase" of federal water quality regulation "monitor[ing] water quality to assure that the implentation plan, a crucial part of the standards, is carried out." The third phase of federal regulation, according to Udall, was the "ultimate revision and improvement of [state water quality] standards as conditions change and as our knowledge improves." Brigadier General Harry G. Woodbury, Director of Civil Works

³⁸⁰ *Id.* at 1-3.

³⁸¹ Stewart L. Udall, Secretary of Interior, Statement Before the Subcomm. on Air & Water Pollution 8 (Aug. 8, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-8).

³⁸² *Id.* at 8-9.

³⁸³ *Id.* at 9.

³⁸⁴ *Id.* at 10. At the outset of his August 1967 testimony before the Senate Subcommittee on Air & Water Pollution, Udall summarized key factors that placed "increased pressure on our limited [water] resources." *Id.* at 3. He identified these factors as follows:

Rapid population growth, predicted to double in 50 to 60 years—demand for water tripling while population doubles—increasing output of wastes

of the Army Corps of Engineers, testified concerning water quality measures under his jurisdiction.³⁸⁵ Of particular interest was his account of Corps studies investigating alternative disposal methods of dredge materials in American harbors. Woodbury noted that the Army Corps of Engineers was "investigating all alternate disposal methods, such as the use of along-shore diked areas, disposal at some distance inland from the shore, treatment of dredged material, [study of] the porosity of containment material, and the evaluation of the pollution abatement results."³⁸⁶ Assistant Secretary of Interior for Water Pollution Control, Frank C. Di Luzio, told Muskie's Subcommittee about, among other things, "[n]ew [p]roblems in [w]ater [p]ollution [c]ontrol."³⁸⁷ These new problems included "thermal pollution," "agricultural run-offs[,] irrigation return flows," water levels in rivers exacerbating pollution, "eutrophication," pesticides and "acid mine" leakage.³⁸⁸

In September, Senator Muskie wrote a letter to Glenn C. Seaborg, Chairman of the Atomic Energy Commission ("AEC") concerning AEC's jurisdiction over the problem of thermal water pollution.³⁸⁹ This led to an exchange of letters between Muskie and AEC throughout the autumn of 1967,³⁹⁰ and to the announcement in October that Muskie's Subcommittee on

and increasing pollution of our air, land, and water from all sources, municipal, industrial, agricultural, recreational, from boating and commercial shipping—new types of waste from industry, new chemicals which are more difficult to manage and control—increasing urbanization, industrialization, and use of technology, rising levels of income and increased outdoor recreation.

Id.

³⁸⁵ Brig. Gen. H.G. Woodbury, Jr., Dir. of Civil Works, Office of the Chief of Eng'rs, Statement Before the Subcomm. on Air & Water Pollution (Aug. 8, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-8). ³⁸⁶ *Id.* at 3.

³⁸⁷ Frank C. DiLuzio, Assistant Sec'y for Water Pollution Control, Dept. of the Interior, Statement Before the Subcomm. on Air & Water Pollution (Aug. 8, 1967), at 2 (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-8).

³⁸⁸ Id. at 2-3

³⁸⁹ See Letter from Sen. Edmund S. Muskie, to Glenn T. Seaborg, AEC Chairman (Sept. 20, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-2).

³⁹⁰ See, e.g., Letter from Harold L. Price, AEC Director of Regulation, to Sen. Edmund S. Muskie (date obscured) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-2); Letter from Sen. Edmund S. Muskie, to Glenn T. Seaborg,

Air and Water Pollution intended to hold "hearings in response to the increasing public concern regarding the Atomic Energy Commission's policy of granting licenses for nuclear power reactors without giving due consideration to the effect of waste heat on State water quality standards."³⁹¹ The publicity that Muskie created by his proposed thermal water pollution hearings attracted considerable attention.³⁹² During October, on less contro-

AEC Chairman (Oct. 25, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-2); Letter from Glenn T. Seaborg, AEC Chairman, to Sen. Edmund S. Muskie (Nov. 4, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-2); Letter from Sen. Edmund S. Muskie, to Glenn T. Seaborg, AEC Chairman (Nov. 27, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-2).

³⁹¹ Press Release, Office of Sen. Edmund S. Muskie 1 (Oct. 30, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-6). The release quoted Muskie's chief impetus in calling for Subcommittee hearings as follows:

I am informed that the State of Massachusetts is objecting to the location of the Vermont Yankee nuclear power plant because as initially proposed, waste heat from the reactor will raise the temperature of the Connecticut River 15 to 20 degrees and the plant will require 60% of the maximum flow of the river for quality standards which call for no increase in water temperatures of the Connecticut.

Water quality standards are the key to the Nation's fight against water pollution. If they are to serve their purpose, adherence to them is essential. Like every other Federal agency, the [AEC] has a defined responsibility to take the leadership in the national water pollution control effort. And, the private electric utilities, taking advantage of over \$2 billion in Federal research investment which made this [nuclear power] technology possible, have a clear obligation to assure maximum protection of public health and welfare from the operation of nuclear power facilities.

Id; *see also* George Lardner, Jr., *Pollution By A-Plants Attacked*, WASH. POST, Oct. 30, 1967, at A6 (noting that "AEC officials denied last week that they have any responsibility for thermal or heat pollution that might stem from AEC-licensed power plants").

³⁹² See, e.g., Handwritten Note from Howard K. Nason, President Monsanto Research Corp., to Don Nicoll, Administrative Assistant for Sen. Edmund S. Muskie (Oct. 30, 1967) (attaching text of a speech by Nason, Chemistry and the human Environment) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-6) (discussion of nuclear power and thermal water pollution among other emerging national environmental issues). In an informal communication from Nicoll to Muskie, Nicoll informed his boss that "[t]he [political] reactions to your statements on the power companies and thermal pollution have been universally very good. You are regarded as the big champion of the people." Inter-office Memorandum from JSF, regarding Conversation with Don Nicoll Today, to Sen. Edmund S. Muskie (Nov. 3, 1967) (on file with the Edmund S. Muskie

versial environmental matters, Muskie received a copy of a State Department communication on water pollution control efforts in the Soviet Union regarding Lake Baikal,³⁹³ and a report from the Department of Commerce, Panel on Electrically Powered Vehicles entitled *The Automobile and Air Pollution: A Program for Progress.*³⁹⁴

Muskie's time in November was focused on conference meetings with the House on Senate Bill 780, the Air Quality Act of 1967. 995 On November 13, the conferees filed a Conference Report. 396 The conferees recommended lower federal appropriations authorization for clean air programs than that contained in the bill passed by the Senate;³⁹⁷ Senate conferees succeeded in persuading their House counterparts to earmark a significant authorization for a two-year research grant program to ascertain ways of reducing pollution from fuels combustion;³⁹⁸ agreement was reached on required automotive fuel additive notification requirements by petrochemical manufacturers of fuel additives;³⁹⁹ and conferees retained Senate language encouraging states to form interstate air pollution control compacts. 400 On November 14, by voice vote in each chamber, the House and the Senate accepted the conference report. 401 During Senate floor discussion on the conference report, Senator Muskie acknowledged that "[i]n some respects the legislation has been improved over the Senate-passed version," with "[t]he only disappointment to the Senate conferees [being] in the total level of the authorization."⁴⁰² Muskie ended his floor remarks recommending acceptance of the conference report on Senate Bill 780 by observing:

Archives, Bates College, U.S. Senate Series, Box SE 818-6).

³⁹³ Airgram from U.S. Embassy, Moscow, to State Dept., Pollution of Lake Baikal and its Control (Oct. 13, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 815-4).

³⁹⁴ DEPT. OF COMMERCE, THE AUTOMOBILE AND AIR POLLUTION: A PROGRAM FOR PROGRESS (Oct. 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 815-6).

³⁹⁵ 1967 C. Q. ALMANAC, *supra* note 316, at 887.

³⁹⁶ H. R. CONF. REP. No. 90-916, at 1 (1967).

³⁹⁷ *Id.* at 25.

³⁹⁸ *Id.* at 26.

³⁹⁹ *Id.* at 26-27.

⁴⁰⁰ *Id.* at 27.

⁴⁰¹ 113 CONG. REC. 32,479 (1967).

⁴⁰² 113 CONG. REC. 32.475 (1967) (statement of Sen. Muskie).

The Federal role is expanded both as a supporter of state programs and, in the event the states fail to act, as an active participant in the development and implementation of air quality standards.

This new role will cost more money, more effort and more effective administration. No longer can air quality criteria be developed on an ad hoc basis. The people of the Nation have spoken. The Congress has responded with the $Act \dots$

On November 21, President Johnson signed Senate Bill 780, as amended, into law. 404 At the signing ceremony, President Johnson paid homage to Senator Muskie and HEW Secretary Gardner; 405 the President went on to say in almost biblical rhetoric:

Don't we really risk our own damnation every day by destroying the air that gives us life?

I think we do. We have done it with our science, our industry, our progress. Above all, we have really done it with our carelessness—our own continued indifference and our own repeated negligence.

Contaminated air began in this country as a big-city problem. But in just a few years, the gray pall of pollution has spread throughout the nation. Today its threat hangs everywhere—and it is spreading still

I am indebted to all of you who had a part in [the legislation].

Congress passed the Clean Air Act in 1963. I signed it to establish the Government's obligation and to establish authority to act forcefully against air pollution.

Two years later we amended that Act. Standards were set in 1965 to control automobile pollution.

⁴⁰³ *Id.* at 32,476. A brief newspaper article described the legislation as a major public policy accomplishment. *See* William M. Blair, *Congress Passes Air Hazard Bill*, N.Y. TIMES, Nov. 15, 1967.

⁴⁰⁴ 1967 C. Q. ALMANAC, *supra* note 316, at 887.

⁴⁰⁵ Remarks Upon Signing the Air Quality Act of 1967, [1967] 2 PUB. PAPERS 1067, 1067-68 (Nov. 21, 1967).

These were important steps. But they were really, as Senator Muskie has reminded us many times, just really baby steps. Today we grow up to our responsibilities. This new Air Quality Act lets us face up to our problem as we have never faced up before.

In the next 3 years, it will authorize more funds to combat air pollution—more funds in the next 3 years to combat air pollution—than we have spent on this subject in the entire nation's history of 180 years.

It will give us scientific answers to our most baffling problem: how to get the sulphur out of our fuel—and how to keep it out of our air.

It will give [HEW] Secretary Gardner new power to stop pollution before it chokes our children and before it strangles our elderly—before it drives us into a hospital bed.

It will help our states fight pollution in the only practical way—by regional airshed controls—by giving the Federal Government standby power to intervene if and when States rights do not always function efficiently

It will help our states to control the number one source of pollution—our automobiles.

But for all that it will do, the Air Quality Act will never end pollution. It is a law—and not a magic wand to wave that will cleanse our skies. It is a law whose ultimate power and final effectiveness really rests out there with the people of this land—on our seeing the damnation that awaits us if the people do not act responsibly to avoid it and to curb it

Senator Muskie has been shoving me as no other person has, all these years, to do something in the pollution field.

I remember an old man told me when I came to Washington, he said, "Son, you get ready. If you are going to live in this town you are either going to be shoving somebody or somebody is going to be shoving you." 406

During November, Senator Muskie also received information from the Army Corps of Engineers on alternative methods of dredge disposal for

⁴⁰⁶ *Id.* at 1068-69 (emphasis added).

minimizing water pollution⁴⁰⁷ and a memorandum from Subcommittee on Air and Water Pollution staffer Leon G. Billings, on negotiations regarding a pending bill to amend the Oil Pollution Act.⁴⁰⁸

In December of 1967, the *Wall Street Journal* published an article on thermal water pollution caused by power generating plants, quoting Muskie extensively on the subject. Moreover, on December 11, Muskie's Subcommittee published a report on Senate Bill 2760, the Federal Water Pollution Control Act Amendments of 1967. On December 12, the Senate passed the bill by voice vote without debate. In December, Muskie also received a proposed "Subcommittee Agenda for 1968" from Leon G. Billings, which included possible legislative activities in four environmental policy areas: "[w]ater [p]ollution," "[a]ir [p]ollution," "[s]olid [w]aste [d]isposal" and "[i]nformational . . . [h]earings."

⁴⁰⁷ Letter from H. G. Woodbury, Jr., to Sen. Edmund S. Muskie (Nov. 15, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 815-1). The letter informed Muskie that "[w]ithin the last two years, considerable attention has been given to dredging operations on the premise that dredging and dredge disposal adversely affect the quality of our water resources." *Id.* at 1. Discussing dredge studies in the Great Lakes, the letter went on to inform Muskie that the Corps was "investigating all alternate disposal methods, such as the use of a long-shore diked areas, disposal at some distance inland from the shore, treatment of dredged material, the porosity of containment material, and the evaluation of the pollution abatement results." *Id.*

⁴⁰⁸ Memorandum from Leon G. Billings, to Sen. Edmund S. Muskie, Oil Pollution Act Amendments (Nov. 30, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 819-1).

⁴⁰⁹ Burt Schorr, Generating Plants Pose a 'Thermal Pollution' Threat to Rivers, Lakes, WALL St. J., Dec. 1, 1967.

⁴¹⁰ S. Rep. No. 90-917 (1967).

⁴¹¹ 113 CONG. REC. 36,130 (1967). S. 2760 authorized pilot programs to prevent lake pollution and acid mine pollution, and provided a comprehensive program to fight oil pollution in water. However, the House did not complete action on similar legislation during 1967. *Id*.

⁴¹² Memorandum from Leon G. Billings, to Sen. Edmund S. Muskie, Subcommittee Agenda for 1968 (Dec. 4, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 816-1). In December, Muskie also took time to recommend to the Eagleton Institute of Politics at Rutgers University, research projects of federal, state, and local concern involving the development of the Mid-Atlantic Air Pollution Compact and the Delaware River Basin Compact. *See* Letter From Sen. Edmund S. Muskie, to Donald G. Herzberg, Executive Dir. Of the Eagleton Institute of Politics at Rutgers Univ. (Dec. 20, 1967) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 816-1).

3. Muskie's Environmental Speeches During 1967.

The demand for Senator Edmund S. Muskie to speak on environmental issues increased during 1967. Some significant examples of his important speeches on environmental policy delivered during 1967 are discussed below. On January 28, Senator Muskie told a meeting of the Middle Atlantic Division of the Association of American Geographers, in a speech entitled *People, Pollution and Environment*:

No one who has studied the pollution [problem] is unaware of the substantial costs of pollution control or the technological obstacles which still hamper effective control in some instances. By the same token, we recognize that there are costs in the failure to control which may affect the long-term economic vitality of . . . the nation. 413

On February 10, Muskie helped dedicate a federal regional environmental health laboratory in California, telling the assembled dignitaries:

Through our scientific genius, we have developed remarkable techniques to convert energy and materials for our convenience. We have created artificial environments on Earth, under the sea, in the sky and in space which are capable of supporting life in relative comfort. But in the process we have succeeded in changing the natural environment in ways that were unforeseen, sometimes unpleasant, and frequently dangerous.⁴¹⁴

On April 5, Muskie gave an address to the 1967 Clean Waters Award Luncheon in Washington, D.C. sponsored by the Clay Pipe Institute and the

⁴¹³ Sen. Edmund S. Muskie, Remarks to the Annual Meeting of the Middle Atlantic Div. of the Ass'n of Am. Geographers, People, Politics and Environment 16 (Jan. 28, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 637-1).

⁴¹⁴ Sen. Edmund S. Muskie, Remarks at the Dedication of the Regional Env'tl Health Laboratory (Feb. 10, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 637-2).

Jaycees.⁴¹⁵ He told his audience that "winning the battle against pollution is not just a matter of money and manpower. Victory over conventional sources of pollution is within our grasp—technologically and economically."⁴¹⁶ This was because, in Muskie's words, "[t]he public is reacting strongly to incidents [of pollution] like Lake Erie, smells on the Potomac, fish kills on the Mississppi, and accidents such as the Torrey Canyon."⁴¹⁷ Muskie focused his concern, however, on what he called "more subtle problems"⁴¹⁸ of water pollution, arguing:

The threat of the future will come in the form of dispersed and persistent wastes which have subtle and long-lasting effects on the environment. In some cases they may upset the biological balance, before we are aware it has happened. These wastes include fertilizers, herbicides, fungicides, insecticides, and irrigation residues from agricultural pursuits, detergents from homes, radioactive wastes from atomic energy and research plants, phosphate and nitrate residues from sewage treatment plants and septic tanks, salts and other materials which wash off highways, parking lots, garages and buildings, and oil and gas from motor boats.

Many of these pollutants are not biodegradable. They defy conventional treatment and build up in water supplies, making them undesirable and dangerous for reuse. Others build up in the food chain, threatening valuable species with extinction. Still others upset the balance of waste and renewal in waterways, contributing to eutrophication and stagnation of lakes and ponds. 419

On April 11, the day after the *Congressional Record* reprinted a *Wall Street Journal* article featuring Senator Muskie, which predicted in glowing

⁴¹⁵ Sen. Edmund S. Muskie, Remarks to the 1967 Clean Waters Awards Luncheon (Apr. 5, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 637-4).

⁴¹⁶ *Id.* at 5.

⁴¹⁷ *Id*.

⁴¹⁸ *Id*.

⁴¹⁹ *Id*.

terms that his influence on the national stage was "considerable" and "gaining." Sen. Muskie addressed the Textile Workers Union of America Legislative Conference in Washington, D.C. in a speech entitled *Protecting* Our Water and Air. 421 ending his speech with an inspirational quotation from the ancient Greek leader, Pericles: "[t]he man who can most truly be accounted brave is he who knows the meaning of what is sweet in life and of what is terrible, and then goes out undeterred to meet what is to come."422 In remarks to the Skohegan, Maine Women's Club, Muskie informed his audience that "[i]n effect, our Earth is a space-ship or biosphere with its own restricted environment. Whatever we do in that environment modifies the environment and affects each one of us—sometimes in unknown and unseen ways."423 In a speech entitled Man and His Environment to the Alabama Consumer Finance Association in Mobile, Alabama on April 17, Muskie reflected at length on the four years of intense legislative activity that he had experienced as Chairman of the Senate Subcommittee on Air and Water Pollution, saying:

> For more than four years the Senate Subcommittee on Air and Water Pollution has pursued an intensive study of the problems of environmental pollution. In addition, we have developed legislation which has changed the shape and direction of our national effort to control and abate contamination of these resources.

> When we started our labors, we encountered some antagonism and considerable apathy. We were accused of trying to over-ride states' rights and of punishing industry. Today, happily, that climate has modified. Our motives are not so suspect as they were in the beginning, and public

⁴²⁰ See 113 Cong. Rec. 8,850 (1967) (statement of Sen. Mansfield, reprinting Norman C. Miller, *Muskie of Maine—Though He Shuns the Senate Limelight, His Influence is Considerable and Gaining*, WALL St. J., Mar. 28, 1967).

⁴²¹ Sen. Edmund S. Muskie, Remarks at the Textile Workers Union of America Legislative Conference, Protecting Our Water and Air, (Apr. 11, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 637-5).

⁴²² *Id.* at 6.

⁴²³ Sen. Edmund S. Muskie, Address to Skowhegan Women's Club 3 (Apr. 24, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 637-5).

support for the water quality and clean air programs has grown remarkably.

No one who has studied the air and water pollution problem is unaware of the substantial costs of pollution control or the technological obstacles which still hamper effective control in some instances. By the same token, we recognize that there are costs in the failure to control which may affect the long-term economic vitality of an area or the nation.

For example, William Bousefield, writing in 1882, noted the adverse effects of air pollution on the manufacturing districts of England, particularly on the textile industry:

"It is idle," he said, "to expect that designers and operatives who pass their lives in scenes of gloom and ugliness can acquire the purity of taste which is necessary to render their work eminent in the markets of the world... Our life, physical and mental, we derive from our ancestors, from our surroundings, and from our education. What, if no change is made for the better, will be that of the descendants of the thousands of operatives who live and who bring up their children entirely in these depressing and sooty fumes? There can be no doubt that a further and general deterioration of their natures will take place, which cannot fail to weaken their energy, and thus impair the national prosperity."

Bousefield's predictions were borne out in England, and the threat continues. Indeed, we know that the effects of air pollution and water pollution are even more insidious than we had realized.

And the American people are aware of it. A recent Gallup Poll indicated that the two federal-aid programs of greatest interest to the American people are the water pollution and air pollution control programs. There is, on the issue of pollution control and abatement, a "revolution of rising expectations." Citizens are no longer willing to accept the clichés that foul industrial odors represent "the smell of money" and that water pollution represents a choice between "payrolls and pickerel"

For the past four years the Senate Subcommittee on Air and Water Pollution has been developing and enacting laws

designed to make possible more effective control and improvement of our environment. We have focussed [sic] on the authorization of air and water pollution control programs which include enforcement authority, grants for construction of abatement facilities, grants and contracts for research and development, grants for state, interstate and local control programs, and the creation of regional plans and programs to implement various parts of these programs.⁴²⁴

In a May 18 speech to a colloquium on air and water pollution, held at the Cooper Union School in New York City, Senator Muskie observed: "The more we study man and his environment, the more we realize that man's future will depend on his ability to keep in balance the forces of nature and the forces of his own technological society."⁴²⁵ In a June 20 address to the National Coal Association, Muskie opined that "[t]he magnitude of the environmental pollution problem is related to people, their concentration in urban and metropolitan areas and their dependence on a high energy society in which . . . the manufacture and utilization of products results in unwanted waste products which contaminate the environment."426 In remarks given on September 19, entitled *Pollution: What Does it Take to Win* before the UPI Conference of Editors and Publishers in San Francisco, Senator Muskie provided the following succinct answer: "My own interest is in the enhancement of the quality of our environment to the point where man's physical, social, economic and mental health will not be impaired by contamination from his activities" and in "achieving that goal in the most expeditious, effective and economic ways we can." As part of his remarks to the

⁴²⁴ Sen. Edmund S. Muskie, Remarks to Alabama Consumer Finance Ass'n, Man and His Environment (Apr. 17, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 637-5).

⁴²⁵ Sen. Edmund S. Muskie, Address at Colloquium on Air Pollution Control at Cooper Union School of Engineering and Science, New Legislation and Its Impact on Air Pollution Control (May 8, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 638-1).

⁴²⁶ Sen. Edmund S. Muskie, Remarks to the Golden Anniversary Convention of the Nat'l Coal Ass'n 1 (June 20, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 638-1).

⁴²⁷ Sen. Edmund S. Muskie, Remarks to the UPI Conference of Editors and Publishers, Pollution: What Does It Take To Win (Sept. 19, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 629-1).

American Institute of Chemical Engineers on November 30, Muskie summed up the challenge of tackling national pollution problems, telling his audience:

[W]e have to anticipate a period during which—even by running as fast as we can—we cannot catch up with ourselves. Our volume of contamination is increasing at a rate faster than we can clean it up. We have to cope with population expansion, a geometric progression of waste disposal from industrial activity and the by-products of an affluent society, and the obsolescence of our waste treatment facilities. We are still at the point of gearing up for our major effort to overcome the sins of the past and to reduce the dangers to our future.

At the same time, I think we must concede that we have not achieved a coherent national commitment to the improvement of our environment. We are not spending enough money. We are not doing an adequate job of setting priorities. We have not taken maximum advantage of the provisions of existing legislation for a coordinated plan for abatement and environmental improvement at the federal, state or local level.⁴²⁸

B. From Environmental Legislator to Vice Presidential Candidate, 1968

1. Muskie's Environmental Legislative Leadership During 1968

Caught up in the politics of a presidential election year, "Congress in 1968 continued to study the problems of water and air pollution but enacted no significant legislation on the subjects."

In the area of water pollution control, "[a] comprehensive and heavily amended water pollution bill (S 3206) . . . narrowly lost a race against the adjournment clock and thereby died with the close of the 90th Congress." 430

⁴²⁸ Sen. Edmund S. Muskie, Remarks to American Institute of Chemical Engineers, Pollution Control: A Legislator's View (Nov. 30, 1967) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 629-3).

⁴²⁹ CONG. QUARTERLY SERV., 1968 CONG. QUARTERLY ALMANAC, at 569 [hereinafter 1968 C.Q. ALMANAC].

⁴³⁰ *Id.* A possible reason for the failure of the legislation to pass during the autumn of 1968

While "the House and Senate had already passed differing forms of the bill, the two chambers were unable to reconcile their variances prior to adjournment."

Despite the lack of success by Congress in enacting major new environmental legislation, Senator Edmund S. Muskie—in his typical methodical, energetic and dogged style—presided at legislative hearings of his Subcommittee on Air and Water Pollution, while planning and supervising environmental policy initiatives with his staff. Among the numerous legislative activities that Muskie engaged in during 1968, some of the more significant activities involved the following: presiding at hearings by the Senate Subcommittee on Air and Water Pollution on the problem of thermal water pollution from nuclear power plants;⁴³² chairing Subcommittee

was Muskie's preoccupation in campaigning as the Democratic Vice Presidential candidate. *Id.*

⁴³¹ *Id*.

The bill, which was considered twice on the floor of each chamber, was enacted on last when the House [on] Oct. 14 rejected controversial Senate amendments which extended pollution controls to offshore oil installations and gave the Secretary of the Interior increased power to control interstate water pollution by licensees of federal agencies.

Id

⁴³² See, e.g., Press Release, Office of Sen. Edmund S. Muskie (Jan. 17, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-2) (announcing proposed Subcommittee hearings on thermal water pollution); Staff Memorandum from Joan (last name unspecified) to Sen. Edmund S. Muskie, Discussion on Thermal Pollution (Feb. 2, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-7).

Thermal pollution, often overlooked in the concentration on more familiar forms of pollution, is coming on unexpectedly fast.

New power plants, especially nuclear ones, will flood many U.S. waterways with a potentially disastrous deluge of heated water

Thermal pollution (utility executives prefer the term "thermal effects") has been around for years. However, only with the advent of nuclear power has the problem loomed really large. For safety reasons, nuclear power plants must operate with lower steam pressure than do plants burning coal, oil or gas; hence the nuclear plants are less efficient and discharge 50% more waste heat through their condenser cooling systems.

Id. (footnote omitted); U.S. Senate Committee on Public Works, Memorandum of Record from Senate Comm. on Public Works regarding "Water Quality Criteria on Temperature—Summary (Department of Interior)" (Feb. 5, 1968) (on file with the Edmund

hearings on proposed air pollution compacts between various states, 433

S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-7); Sen. Edmund S. Muskie, Opening Statement to Senate Subcomm. on Air & Water Pollution (Feb. 6, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-2).

This morning we begin a series of hearings on a water pollution problem which has, heretofore, been largely ignored. Only recently, during water quality standards development . . . has public attention begun to focus on thermal pollution.

Little real effort has been made to control waste heat discharges to prevent adverse effects or to provide public benefits. More importantly, there is a lack of specific information required to determine the ecological effects of a large volume discharge from particular installations. But it is obvious, from limited information presently available, that we cannot allow this situation to continue.

Id.; Sen. Edmund S. Muskie, Opening Statement to Senate Subcomm. on Air & Water Pollution (Feb. 13, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 830-3); William H. Williamson, *Muskie and Curtis Warn On Dangers of Thermal Pollution at Hearing Here*, PORTLAND EVENING EXPRESS, Feb. 13, 1968, at 1 (Muskie said "the Atomic Energy Commission has so far refused to take jurisdiction over the question of thermal pollution. It is concerned only with the dangers of nuclear radiation "); Sen. Edmund S. Muskie, Opening Statement to Senate Subcomm. on Air & Water Pollution (Apr. 19, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-1) ("The Subcommittee has heard a variety of expert witnesses, in Washington and elsewhere, who have provided basic information on both the known, and perhaps more importantly, the unknown effects of water temperature variations. We have also heard an extensive discussion of the technology of control of waste heat.").

⁴³³ See, e.g., Press Release, Office of Sen. Edmund S. Muskie (Feb. 13, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 817-4).

In announcing the hearing [on three proposed air pollution control compacts recently referred for review by the Senate Judiciary Committee], Senator Muskie said: "The Subcommittee on Air and Water Pollution is on record as being firmly committed to the compact principle as a means of establishing effective interstate air pollution control programs.

Id.; Memorandum of Record from Leon G. Billings, Professional Staff Member, Subcomm. on Air & Water Pollution, to Sen. Edmund S. Muskie, Analysis of S. 2350, the Proposed Air Pollution Compact Between the States of Ohio and West Virginia (Jan. 10, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 831-3) (critiquing proposed compact); Memorandum from Leon G. Billings, to Sen. Edmund S. Muskie, Hearings on Pending Interstate Compacts (Mar. 1, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 831-3) (discussing future Subcommittee hearings that "will hear witnesses on the Indiana-Illinois Compact which has

leading Subcommittee hearings on solid waste disposal and waste managemen research, 434 presiding at hearings on water pollution control policy, 435

many of the same problems associated with Ohio-West Virginia"); Press Release, Office of Sen. Jennings Randolph (June 21, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 817-3).

Senator Jennings Randolph, Chairman of the Public Works Committee, today released the recommendations of the Committee on three pending interstate air pollution control compacts which were the subject of hearings before Senator Edmund S. Muskie's Subcommittee on Air and Water Pollution earlier this year.

The three compacts are: S. 2350 West Virginia-Ohio Air Pollution Control Compact[,] S. J. Res. 95, Mid-Atlantic States Air Pollution Control Compact[,] and S. 470, Illinois-Indiana Air Pollution Control Compact.

These compacts were . . . unanimously approved by the members of the Public Works Committee, [with] recommend[ed] modification of all three proposals in order to bring them into conformity with Federal Clean Air legislation.

Id.

⁴³⁴ See, e.g., Press Release, Office of Sen. Edmund S. Muskie (Jan. 17, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-2) (announcing proposed Subcommittee hearings on solid waste disposal); Press Release, Office of Sen. Edmund S. Muskie (May 8, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box 832-6).

Senator Edmund S. Muskie . . . today announced four days of hearings on solid waste disposal and waste management research.

[T]wo legislative proposals relating to solid waste are pending before the Subcommittee. The first, S. 1646, would authorize a massive Federal grant program to assist communities in construction of solid waste disposal facilities. The second bill, S. 3201, is an Administration proposal which would simply extend the present Federal solid waste program for one year.

Id.; Memorandum from Richard D. Grundy, Professional Staff Member, Subcomm. on Air & Water Pollution, Hearings on Environmental Quality Management and Waste Management Research, May 21-23 and June 3, 1968 (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 830-8).

The Committee needs to define a public policy relating to the responsibilities and rights in the use of air, water, and land resources. Legislation has been enacted to deal separately with air, water, and solid waste phases of our environment, however, a policy directed at their interrelationship remains to be defined.

The need for a policy relating to use of the air, inland and coastal waters, and land resources is highlighted when it is realized that any single

and chairing Subcommittee hearings on review of air quality criteria. 436

form of waste can be transformed to another form during handling and disposal. Solid waste, for example, may result in gaseous wastes when incinerated, liquid wastes when ground in garbage grinders, or remain a solid waste materials disposed of in landfills. This is but one example which suggests the need for an integrated policy for all forms of wastes, rather than separate policies for solid waste disposal, air pollution control, and sewage disposal. Such a policy of environmental quality management for all forms of wastes is clearly required.

Id.; Sen. Edmund S. Muskie, Floor Statement Introducing Amendment of Solid Waste Program to H.R. 15758 (handwritten date of Aug. 1, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 631-7).

The Solid Waste Disposal Act of 1965 . . . launched a new program to develop efficient means of disposing [of] the millions of tons of solid wastes that clog the Nation's cities and countryside. In 1965 only two States had identifiable solid waste programs, while today [in 1968] 38 States are developing modern plans for statewide solid waste programs .

. . .

Id.

⁴³⁵ See, e.g., Press Release, Office of Sen. Edmund S. Muskie (Jan. 17, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-2) (announcing proposed Subcommittee hearings on water quality standards and water pollution research and development and on vessel pollution); Letter from Stewart Udall, Sec'y of the Interior, to Pres. Lyndon B. Johnson (Mar. 8, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box 818-4) ("Enclosed is a draft of a proposed bill '[t]o amend the Federal Water Pollution Control Act . . . relating to the construction of waste treatment works, and to the conduct of water pollution control research, and for other purposes."); Memorandum from Leon G. Billings, to Sen. Edmund S. Muskie, S. 2525, Vessel Pollution (Apr. 23, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 832-9).

The hearings on S. 2525 seemed to indicate three major concerns: (1) pollution from vessels is generally infinitesimal and, therefore, should be attacked only after cleaning up other more important sources; (2) however, there should be Federal legislation which pre-empts boat and vessel pollution control requirements; and (3) pleasure craft and commercial vessels should be handled in separate sections of the bill.

Id.; Water Quality Improvement Act of 1968, S. REP. No. 90-1370 (1968) (Sen. Muskie indicated that Subcommittee hearings had taken place on April 10, 11, and 23, 1968, recommending passage, with amendment); Federal Water Pollution Control Act Amendments of 1968, S. REP. No. 90-1371 (1968) (Sen. Muskie indicated that Subcommittee hearings had taken place on April 2, 3 and 4, 1968, recommending passage with amendments).

⁴³⁶ See, e.g., Press Release, Office of Sen. Edmund S. Muskie (Jan. 17, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 818-2)

2. Muskie's Selection and Campaign as Democratic VP Candidate, 1968

In March of 1968, President Lyndon B. Johnson was reeling from woes with America's growing involvement with war in Vietnam, was concerned about his health, and was under political attack by both Senator Eugene McCarthy (D-Minn.) (who had won forty-two percent of the Democratic primary vote in New Hampshire to Johnson's forty-nine percent on March 12) and Senator Robert F. Kennedy (D-N.Y.), who had announced his candidacy for the Presidency on March 16. In late March, Johnson decided not to run for re-election.⁴³⁷ On Sunday evening, March 31, at the end of a speech to the Nation on Vietnam, Johnson said that he did not want:

[T]he presidency to become involved in the partisan divisions that are developing in this political year. . . . With our hopes and the world's hopes for peace in the balance every day, I do not believe that I should devote an hour or a day of my time to any personal partisan causes or to any duties other than the awesome duties of this office—the presidency of your country. Accordingly, I shall not seek, and I will not accept,

(announcing proposed Subcommittee hearings on air quality criteria).

Air pollution levels cannot be allowed to continue to rise indefinitely. The health implications of such lack of control and abatement measures are dramatic and manifold. The question that must be resolved is: when and to what degree should control be exercised?

There is ample quantitative evidence of acute air pollution effects on public health and welfare during air pollution episodes in which persons with chronic bronchitis, lung cancer, and other respiratory and cardiopulmonary diseases have suffered aggravated distress or death. There is evidence that air pollution decreases the performance of otherwise healthy individuals. On the other hand, there is limited knowledge on the effects of long-term exposure to relatively low concentrations of contaminants over periods of 10, 20, or 30 years.

DALLEK, *supra* note 46, at v; Memorandum from Richard D. Grundy, to Sen. Edmund S. Muskie, Hearings on 'Air Quality Criteria: Their Basis and Use in Setting Air Quality Standards,' July 29-31, 1968 (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 831-1) ("The hearings [proposed] this week will provide testimony from experts on epidemiology, public health and respiratory diseases on experience with general health and safety practices and their application to the development of air quality criteria and standards.").

⁴³⁷ DALLEK, *supra* note 46, at 519-30.

the nomination of my party for another term as your President.⁴³⁸

Johnson's decision not to run again for President led a bizarre series of political events during the spring and summer of 1968: the assassinations of Dr. Martin Luther King, Jr. and Senator Robert F. Kennedy, which led to the Democrats nominating Vice President Hubert H. Humphrey for President and to Humphrey choosing Senator Edmund S. Muskie to be his running mate. 439

Edmund S. Muskie continued to gain national stature during the months leading up to the Democratic National Convention, held in Chicago, Illinois in August of 1968. During this timeframe, Muskie gave a number of speeches on American environmental policy and creative federalism, and authored articles on environmental protection. By way of illustration, in January, he gave an address on *New Ventures in Creative Federalism* to the North Central Texas Council of Governments. In February, he spoke on the topic, *Save Our Lake—Chicago's Stake in an Effective National Water Quality Program* to the Urban League of Chicago. In February, he wrote a guest editorial on thermal water pollution that was published in the *New England Journal of Medicine*. In March, he addressed an audience of the Federal Bar Association on the topic of environmental pollution, while also speaking to the National Wildlife Federation on *Man and His Future*

⁴³⁹ *Id.* at 533-34 (King assassination), 547-58 (Senator Kennedy assassination), 569-75 (Humphrey nomination and Muskie nomination).

⁴³⁸ *Id.* at 529.

⁴⁴⁰ *Id.* at 569-75 (discussing Democratic National Convention in Chicago during August of 1968).

⁴⁴¹ Sen. Edmund S. Muskie, Remarks to North Central Texas Council of Governments, New Ventures in Creative Federalism, (Jan. 19, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 629-5).

⁴⁴² Sen. Edmund S. Muskie, Remarks to Urban League of Chicago, 'Save our Lake'—Chicago's Stake in an Effective National Water Quality Program (Feb. 5, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 630-1).

⁴⁴³ Sen. Edmund S. Muskie, Guest Editorial . . . for the New England Journal of Medicine (Feb. 20, 1968) (text on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 630-24).

⁴⁴⁴ Sen. Edmund S. Muskie, Remarks to Fed. Bar Ass'n Symposium on Env'tl Pollution, Public Health and Environmental Improvement (Mar. 14, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 630-4).

Environment—Water, Air and Noise. ⁴⁴⁵ In April, he gave a speech on New Dimensions of Environmental Quality Management to the Travelers Research Center Seminar on Managing the Quality of Urban Air in Hartford, Connecticut. ⁴⁴⁶ In May, he talked about Progress Against Pollution—A Merging of Interests to the Instrument Society of America in Philadelphia, Pennsylvania, ⁴⁴⁷ and later in the month he gave an address to IBM executives on Air and Water Pollution—Action and Innovation. ⁴⁴⁸ In June, he gave a speech on What the Congress Intends To Be Accomplished By the Air Quality Act of 1967 to the Air Pollution Control Association in St. Paul, Minnesota. ⁴⁴⁹ In a remarkable June commencement address for the St. Louis High School in Biddeford, Maine, Muskie spoke on Public Service In A Dangerous Age. ⁴⁵⁰ He urged the graduating high school seniors to think about public service in a time of national tragedy:

Of all the speeches a public servant must give, the commencement address is the most difficult.

It demands a capacity to inspire without being unrealistic. It requires an understanding of the hopes and troubles of youth, coupled with the wisdom which should come with age. My task is doubly hard tonight. I would bring you high

⁴⁴⁵ Sen. Edmund S. Muskie, Address to the 32nd Annual Meeting of the Nat'l Wildlife Fed., Man and His Future—Water, Air and Noise (Mar. 8, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 630-4).

⁴⁴⁶ Sen. Edmund S. Muskie, Remarks to Travelers Research Seminar on Managing the Quality of Urban Air, New Dimensions of Environmental Quality Management (Apr. 26, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 631-1).

⁴⁴⁷ Sen. Edmund S. Muskie, Remarks to The Instrument Society of America, Progress Against Pollution—A Merging of Interests (May 20, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 631-2).

⁴⁴⁸ Sen. Edmund S. Muskie, Remarks to IBM Executives Meeting, Air and Water Pollution—Action and Innovation (May 23, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 631-2).

⁴⁴⁹ Sen. Edmund S. Muskie, Remarks to the Air Pollution Control Assn., What the Congress Intends to be Accomplished by the Air Quality Act of 1967 (June 26, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 631-5). ⁴⁵⁰ Sen. Edmund S. Muskie, Commencement Address at Graduation of St. Louis High School, Public Service in a Dangerous Age—A Challenge for Christian Youth (June 9, 1968) (notes on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 631-3).

expectations and glad congratulations, but the times place a damper on our joys

The events of this past week have been etched in our minds. The assassination of Senator [Robert] Kennedy has shocked us, and it has shaken our confidence in our society and in ourselves.

How, we have asked ourselves over and over, can a society founded on the premise of the rule of law generate such violent and terrible consequences?

Seen against the background of international crises and domestic disorder, the brutal slaying of a man committed to public service is almost more than we can bear

Many years ago the great English Parliamentarian, Edmund Burke said: "The only thing necessary for the triumph of evil is for good men to do nothing."

And at first glance "to do nothing" appears to be the easiest course of action.

With all of the turmoil in the world today, it would not be difficult to say, "Why should I become involved in the problems of other countries . . . ?"

"Why should I become involved with the problems of people in our nation's ghettos?"

"What concern is it of mine that there are many Americans who have been denied full rights of citizenship?"

"Why should I worry about water, air and noise pollution?"

The direct answer to such questions . . . is that you have a . . . duty to offer service to your God, your country and your fellow-man.

That teaching has stressed the importance and the necessity of participation by all men to insure the "triumph over evil"

If you, who have the education, the perspective, and the self-discipline, fail to participate to the fullest extent of your abilities, America will stumble, and if America stumbles, the world may fall.⁴⁵¹

⁴⁵¹ *Id.* at 1,3,11.

In July, Muskie published an article, *A Plea for Dynamic Federalism*, in the journal *Public Management*, while also publishing an article in *George Washington Law Review* entitled *The Role of Congress in Promoting and Controlling Technological Advance*. A July 15, 1968 memorandum from Leon G. Billings, staffer of the Senate Air and Water Pollution Subcommittee, to Donald E. Nicoll, Administrative Assistant to Senator Muskie provided a hint of Muskie's possible prominence at the upcoming August Democratic National Convention. Billings informed Nicoll that he had received an invitation . . . to participate in an ad hoc, off the record group, which will review the Democratic Platform Draft prior to furnishing it to the Democratic National Convention Platform Committee; the meeting was to be with such prominent national figures, associated with President Lyndon Johnson or President John F. Kennedy, as Bill Moyers and Ted Sorenson. In the memorandum, Billings asked for Senator Muskie's input on environmental issues prior to the projected high level ad hoc meeting.

On August 19, Muskie provided a detailed proposal to the Democratic National Convention Platform Committee meeting in Washington, D.C.⁴⁵⁷ Providing "a Senate point of view" of the record of the Democratically—controlled Congress over the prior four years, Muskie highlighted what he termed "an unprecedented effort in the six major areas of domestic need in our society out of which are emerging the issues of this [1968] election year: (1) jobs and income; (2) housing; (3) education; (4) public safety; (5) environmental quality; and (6) racial tensions."⁴⁵⁸ On August 29, Muskie was chosen as the Democratic Vice Presidential running mate of Hubert H. Humphrey in his bid for the Presidency. Muskie's acceptance speech, given

⁴⁵² Sen. Edmund S. Muskie, A Plea for Dynamic Federalism, 50 PUB. MGMT. 160 (July 1968).

⁴⁵³ Edmund S. Muskie, *The Role of Congress in Promoting and Controlling Technological Advance*, 36 GEO. WASH. L. REV. 1138 (1968).

⁴⁵⁴ Memorandum from Leon G. Billings, to Donald E. Nicoll, Several Matters (July 15, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 831-1).

⁴⁵⁵ *Id.* at 2.

⁴⁵⁶ *Id*.

⁴⁵⁷ Sen. Edmund S. Muskie, Statement to the Platform Committee for the 1968 Democratic National Convention (Aug. 19, 1968) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 631-7).

⁴⁵⁸ *Id.* at 1.

to the Democratic delegates in Chicago, Illinois, made oblique reference to the violent demonstrations that had been taking place outside the Chicago International Amphitheater, where the speech was given:⁴⁵⁹

My reaction to [the VP nomination] is an acute awareness of the work we must do—

To build a peace.

To heal our country.

To make a society such as ours work is not easy.

It means learning to live with, understand, and respect our *differences* as human beings—of different colors, different races, different national backgrounds, different cultural levels, different tastes and intellectual capacities, different educational attainments, and different social backgrounds, personalities and dispositions—and to accept each other as equals

In all frankness our society has not worked in this way up to now.

There are risks in it, of course. There is evil as well as good. There is meanness as well as generosity.

There is dishonesty as well as honesty. There is violence as well as peace.

And there are those who believe it cannot work.

To put their doubts in perspective, let us not forget that when we began this experiment in government we did not *instantly achieve* an equal chance for every member of our society, but we did promise to work toward it.⁴⁶⁰

In a six page Democratic Presidential Campaign briefing paper entitled *Post Convention—Policy, Issues, Approaches*, ⁴⁶¹ the "Current Situation," at the start of September 1968, was described as follows:

⁴⁵⁹ See generally TODD GITLIN, THE SIXTIES: YEARS OF HOPE, DAYS OF RAGE 285-91 (1987) (discussing the driving forces behind the confrontationalist approach adopted by the New Left, culminating in the demonstration at the Democratic Convention in Chicago).

⁴⁶⁰ Sen. Edmund S. Muskie, Acceptance Speech for the Nomination as Democratic Nominee for the Vice Presidency of the United States, Democratic National Convention 2,4 (Aug. 29, 1968) (handwritten original emphasis; handwritten changes in prepared text) (text on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 631-7).

⁴⁶¹ Democratic Nat'l Comm. Candidate Briefing Book, Post Convention—Policy, Issues, Approaches (undated) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 1011-1).

- 1. The Vice President [Humphrey] leads [the Republican National Party nominee, Richard] Nixon by a small margin with [former governor of Alabama George] Wallace getting 18 percent of the vote and drawing substantially more from Nixon than [from] Humphrey. There has been a sizable decline in HH's popularity since June 1967 with most of it taking place since April 1968. The most important reason appears to be his close association with the [Johnson] Administration, clearly unpopular since the Tet Offensive [in early 1968].
- 2. Neither candidate has a clear advantage on personality. Nixon is rated higher on strength and decisiveness, HH on warmth, and putting public ahead of private interest. Strong leadership and integrity in public service have been shown to be the most important qualities in the voters' judgment. There is substantial opinion that HH is weak and indecisive.
- 3. The major problems to most people are the war in Viet Nam, Law and Order, race relations, economic and social problems. Nixon currently is rated better able to deal with these problems than Humphrey but less so on economic and social problems [that are] traditional Democratic issues. There is clearly strong support for helping the poor to help themselves but no give away. Education ranks second only after crime and lawlessness as the most important problem facing people in their own communities and is a democratic-plus, also help for the elderly [sic].
- 4. There is a very substantial majority (over 2 to 1) of people identifying with the Democratic Party over the Republicans. This explains the Vice President's current lead over Nixon where on most indicators both personality and issues he is rated lower than Nixon. However the Democratic Party, like Humphrey, has suffered a sharp decline in confidence so far as the Presidency and ability to handle the nation's major

problems are concerned since the fall of 1967. Ironically the same percent of voters as in 1964 would prefer to see Democrats in Congress. 462

Six issues were highlighted in the post-convention, Democratic National Convention political briefing paper, as the focus of the Humphrey-Muskie campaign during the fall of 1968: (1) "The Humphrey image," (2) "The Democratic Party," (3) "Viet Nam," (4) "Law and Order," (5) "Race Relations," and (6) "Economic and Social Issues" (consisting of the threefold cluster of "Poverty," "Education," and "Rural Urban Balance"). 463 The closest statement to environmental quality as an issue of importance in the upcoming campaign was the briefing paper's discussion of "Rural Urban Balance":

This encompasses every social and economic problem The pledge to develop a dynamic national policy that would direct itself to the challenge of people and space would command great public attention and curiosity. Such a policy would encompass on a balanced basis the needs of the inner city and the ghettos, suburbia, new towns (maybe suggest 15-[new towns] of 200,000 population and start a task force to decide where they should be located) and multi-county development in rural America. This could be a new fresh dynamic . . . call to action to literally remake the face of the nation. 464

On September 1, Senator Edmund S. Muskie appeared on the NBC television program, *Meet the Press*. 465 The interview focused on the violent confrontation between youthful demonstrators at the Chicago Democratic National Convention, the law and order issue, the American war in Vietnam, and the ability of a vice president to truly have an independent political identity from the President. 466 The only statement about domestic issues that

⁴⁶² *Id.* at 1-2.

⁴⁶³ *Id.* at 2-5.

⁴⁶⁴ *Id.* at 5.

⁴⁶⁵ Transcript, Meet the Press, Guest: Senator Edmund S. Muskie, Democratic Vice Presidential Nominee (NBC Television and Radio Broadcast Sept. 1, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 632-1). ⁴⁶⁶ *Id.*

Muskie managed to get in edgewise during the half-hour program was the following, rather general, and somewhat tepid, assessment, with no specific mention of his environmental leadership in the Senate:

There are many pieces of legislation with which I have been connected that represent compromises from what I would have thought was ideal.

What we have done in the domestic field in the last few years is to assemble a great proliferation of dom[e]stic programs. I think the principal objective we now need to pursue is the business of coordinating them and combining them so that they can focus more effectively up on human needs. The great failure in this respect is, I think, the great challenge of the future. Now, this is not to say that the programs were wrong. It was right to initiate the programs, but now we need to bring them in focus. 467

While Muskie did not campaign extensively on the issue of environmental quality during the 1968 Presidential Campaign, three memorable speeches put forth several of his ideas on environmental protection. On September 26, in Detroit, Michigan, Muskie noted:

Several times in this campaign I have spoken of the paradoxes of our society: poverty in the midst of general prosperity, of hunger in the midst of food surpluses, and the tension and the disorder in the midst of material well-being, and the pollution and transportation snarls in the midst of technological achievements.⁴⁶⁹

⁴⁶⁸ *Cf.* Memorandum from Elizabeth Haskell, Staff Assistant to the Assistant Secretary for Water Pollution Control, Office of the Assistant Sec'y of the Interior, to Leon [Billings] (Sept. 9, 1968) (with a five-page attachment consisting of twenty-four "Water Pollution Quotes" to be used, presumably by Muskie, during the fall 1968 Presidential campaign) (on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 1011-13). The sources of quotes ranged from government reports to politicians including Edmund Burke, Theodore Roosevelt, John F. Kennedy, and Winston Churchill, to artists and social thinkers, including Archibald MacLeish, Albert Schweitzer, and Walt Whitman.

⁴⁶⁷ *Id.* at 16.

⁴⁶⁹ Sen. Edmund S. Muskie, Remarks at City Hall in Detroit, Mich. (Sept. 26, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series,

Ending his Detroit address, Muskie referred to an observation made several years earlier by an unknown president of Brown University that "Americans have succeeded notably in founding states but they have not yet learned to govern cities." Muskie responded to this quotation by urging that the United States "must find a way to govern these great ungoverned masses of our people, on a broad enough basis to focus the resources of each metropolitan area upon the needs of the people where they exist." 471

On October 9, Muskie gave a speech in Philadelphia, entitled *Man and His Environment: The Crucial Balance*. He started the address with dramatic flourish, contending: "Of all the troubles of modern society, *pollution* is the most *insidious*. Originally it was regarded as a *nuisance*. *Later* it seemed an expensive and dangerous limitation on economic growth and public health. Today we recognize it as a threat to civilization itself." Muskie continued by emphatically arguing: "The question [industry] must face, along with every other American and every other industrial group is not *whether* we should curtail pollution, but *how*. We must *cut down* on pollution before it *cuts us* down;" and going on to claim that "[f]or millions of Americans, crowded in our vast metropolitan areas, there *is no escape*. Pollution is one more insult in their daily lives, making the slums more oppressive, shortening their lives and contributing to social tensions." one "475"

On October 14, at a rally in Yonkers, New York, Muskie devoted a considerable portion of his speech to discussing the need for environmental protection. He said:

[W]e have neglected [in our national attempt to achieve economic prosperity] some other things. We have neglected the quality of life, the quality of our environment. We have overlooked what we are doing to our environment to destroy its capacity, not only to provide the air and water we need to survive as human beings, but in terms of the ability to enjoy

Box SE 633-1).

⁴⁷⁰ *Id.* at 5.

⁴⁷¹ *Id.* at 6.

⁴⁷² Sen. Edmund S. Muskie, Remarks to Am. Gas Assoc., Man and His Environment: The Crucial Balance (Oct. 9, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 633-6).

⁴⁷³ *Id.* at 1.

⁴⁷⁴ *Id*.

⁴⁷⁵ *Id.* at 2.

our environment—to enjoy the clear sky, the clear blues, the clear colors of nature in the raw, to be able to enjoy the beauty which is associated with nature in its pristine natural state.

I say we have neglected that. And we apparently have been willing to pay that as a price for economic security. But we have now reached a point where two conclusions are clear:

One, that we can't afford that price. At this moment there is circling around the globe a space craft with three Americans, and we know that their lives depend upon the quality of the air and the water that they are able to take with them. And their supply of each is fixed. It cannot be increased. And so it must be purified as they use it.

Now, that is a very clear lesson to all of us, as we watch them, but it is not so clear to us that our earth is also a space craft, revolving around the sun, and that our lives and our enjoyment of those lives depends upon the quality of that air and water and that that supply is fixed and cannot be increased, notwithstanding the fact that our population is growing by leaps and bounds, that our manufacturing capacity is increasing by leaps and bounds, and that both people and industry make greater and greater demands upon the same supply of water and air.⁴⁷⁶

At the end of his Yonkers speech, Muskie criticized the Republican Presidential Candidate, Richard M. Nixon, and Nixon's statement during the campaign about "the need for cleaning up our environment" as flawed and as too little and too late. 478

On election night, November 5, the vote returns, at first, seemed to indicate that the Republican team of Nixon-Agnew would lose out to the Democratic team of Humphrey-Muskie, since the latter "took an early lead in the East, winning such states as Connecticut and New York by large majorities." As the evening wore on, however,the Nixon-Agnew ticket "began to pick up strength, winning many southern states, most of the states

⁴⁷⁶ Sen. Edmund S. Muskie, Remarks at Larkin Plaza, Yonkers, N.Y. 1 (Oct. 14, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 634-1).

⁴⁷⁷ *Id*.

⁴⁷⁸ Id

 $^{^{479}}$ David C. Whitney & Robin Vaughn Whitney, The American Presidents 339 (9th ed. 2001).

of the Midwest, and all the western states except Washington and Hawaii."⁴⁸⁰ "[T]he final count [was] Nixon[-Agnew winning] thirty-two states with 301 electoral votes, Humphrey[-Muskie winning] thirteen states with 191 electoral votes, and [the third party ticket of] Wallace[-LeMay claiming] five states with 46 electoral votes."⁴⁸¹ The 1968 Presidential election focused on popular sentiment against the Vietnam War;⁴⁸² environmental issues played only a bit part in the contest.

After the election, Senator Muskie, ever vigilant, ever outspoken, continued to address national environmental issues during the remainder of the year at public appearances around the country.⁴⁸³

IV. CONCLUSION

The public career of the late Edmund S. Muskie during 1965 through 1968 provides an illuminating prism by which we can track the early development of modern American environmental law, while concomitantly observing excellence in the legislative process. In the laws that he helped craft, in the intricacies of the legislative process of the United States Congress that he navigated and relished, in the speeches and public remarks that he delivered, in his attention to the details of national environmental policy, we can gain a vision of the social and cultural forces that preceded the Environmental Decade of the 1970s, 484 and set the stage for the legal paradigm we have now at the outset of the 21st Century.

Muskie was a political opportunist in the best sense of that phrase. When President Lyndon B. Johnson led in proposing new national legislative initiatives to abate polluted air and water, Muskie accommodated the Executive Branch by sponsoring legislation, holding hearings of his Senate Subcommittee on Air and Water Pollution, supervising staff studies, and issuing favorable press releases. When the Johnson Administration faltered, however,

⁴⁸¹ *Id.* "The popular vote was much closer, with Nixon leading Humphrey by only seventenths of one percent of more than seventy-two million votes cast." *Id.*

⁴⁸⁰ Id.

⁴⁸³ See, e.g., Sen. Edmund S. Muskie, Remarks to New England Conference on Air Pollution (Dec. 2, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 635-1); Sen. Edmund S. Muskie, Remarks to State of Maine Development Through Conservation Conference (Dec. 11, 1968) (transcript on file with the Edmund S. Muskie Archives, Bates College, U.S. Senate Series, Box SE 635-1).

⁴⁸⁴ See generally Michael E. Kraft & Norman J. Vig, Environmental Policy From the 1970s

Muskie excoriated the President and the offending agencies, proposed dynamic legislation to pick up the pace of implementing more protective and sensible environmental standards, focused the spotlight of Subcommittee hearings and staff studies on deficient administration of national air and water pollution laws, and issued critical press releases pointing out those deficiencies.

Edmund S. Muskie's virtues of hard work, humility, integrity, courage, compassion, and good faith, ⁴⁸⁵ exhibited in his public life and, more particularly, his legislative advocacy for more effective national environmental laws during this period from 1965 through August 1968, led to his increasing national prominence, to his reputation as the most knowledgeable member of Congress on matters of environmental policy, and to his selection by Hubert H. Humphrey and the Democratic National Convention as their nominee for Vice President. These virtues also catapulted Muskie into the status of frontrunner for the Democratic nomination for President of the United States in 1972 and spurred him on to lead the country in fashioning much of the landmark environmental legislation of the 1970s.

Edmund S. Muskie's performance, virtues, and passion for exploring and fashioning new concepts of environmental protection through the legislative process of the United States Senate make him a worthy candidate for Themis, our ideal legislator. In a future article, I hope to theorize on the nature and specific characteristics of Themis while also commenting on the importance of this theory for improving the legislative process. 486

to 2000: An Overview, in Environmental Policy: New Directions for the Twenty-First Century 1, 11-14 (Norman J. Vig & Michael E. Kraft eds., 2003) (discussing environmental policy escalation during the 1970s).

What is a virtue? It is a force that has or can have an effect. Hence the virtue of a plant or a medication, which is to cure, or of a knife, which is to cut, or of a human being, which is to will and to act in a human way. These examples, which come from the Greeks, say more or less what is essential: virtue is a capacity or power, and always a specific one. The virtue of hellebore is not that of hemlock; a knife's virtue is not that of the hoe; man's virtue is not that of the tiger or the snake. The virtue of a thing or being is what constitutes its value, in other words, its distinctive excellence

Id. at 2.

⁴⁸⁵ See generally André Comte-Sponville, A Small Treatise on the Great Virtues (Metropolitan Books 2001). According to Comte-Sponville:

⁴⁸⁶ See supra note 2 and accompanying text.