Federal Water Pollution Control Act Amendments of 1961

WILBUR J. COHEN and JEROME N. SONOSKY

ON JULY 20, 1961, President Kennedy signed into law the important Federal Water Pollution Control Act Amendments of 1961 (Public Law 87-88).

The new amendments make significant and basic improvements in the Federal water pollution control program. They establish the Department of Health, Education, and Welfare as a major water resource agency of the Federal Government. The legislation is a culmination of a long series of legislative proposals and amendments relating to the control of water pollution. Its adoption provides the statutory foundation on which clean water programs, national in scope, can now be formulated.

Following a brief history of water pollution control legislation, this report describes the effects of the 1961 amendments.

History of Legislation

The first Federal water pollution control legislation was enacted in the 1890's primarily to prevent impediments to navigation. Some 15 years later the Public Health Service Act of 1912 was passed authorizing investigations of water pollution which might be related to disease. In 1924 there came another law, the Oil Pollution Act. It was concerned with the discharge of oil into coastal waters which was causing damage to aquatic life, harbors and docks, and recreational facilities.

Mr. Cohen is Assistant Secretary for Legislation in the Department of Health, Education, and Welfare. Mr. Sonosky is Special Assistant to the Assistant Secretary. Three times during the 1930's attempts were made to enact a comprehensive water pollution control law. The 74th Congress nearly enacted such a law in 1936. The 75th Congress actually passed one in 1938, but this was vetoed because of technical defects. In 1940 the 76th Congress almost succeeded in passing a third pollution law.

War interrupted these attempts and it was not until 1948 that a bill was finally passed and signed by President Truman (Public Law 845, 80th Cong.).

The Water Pollution Control Act of 1948 was enacted as temporary, experimental legislation which was to be reviewed after a trial period of 5 years and revised on the basis of experience. It was extended for an additional 3 years to June 30, 1956, by the 82d Congress (Public Law 579).

In 1956 the Federal Water Pollution Control Act (Public Law 660, 84th Cong.), extending and improving the 1948 act, was approved, and this act has now been broadened and greatly strengthened by the 1961 amendments. (An attempt to amend the law in 1960 failed when a bill was vetoed by President Eisenhower.)

An expanded Federal water pollution control program became one of the first objectives of the Kennedy Administration. In his special message to Congress on natural resources, only a month after taking office, President Kennedy endorsed bills introduced by Congressman John A. Blatnik, of Minnesota, and Senator Robert Kerr, of Oklahoma, and outlined the elements he believed necessary for an effective water pollution control program, saying:

"Our Nation has been blessed with a bountiful supply of water; but it is not a blessing we can regard with complacency. . . . Our available water supply must be used to give maximum benefits for all purposes—hydroelectric power, irrigation and reclamation, navigation, recreation, health, home, and industry. . . . To meet all needs—domestic, agricultural, industrial, recreational—we shall have to use and reuse the same water, maintaining quality as well as quantity. In many areas of the country we need new sources of supply—but in all areas we must protect the supplies we have."

Secretary Abraham Ribicoff made a strong plea for the new legislation in testimony before the Public Works Committee of the U.S. House of Representatives on March 29, 1961, in which he advocated adoption of the President's proposals. He pointed out that this country's efforts to control pollution failed in the past because they were not geared to the needs of a swiftly growing population and an expanding urban, industrial society.

On May 3, 1961, the House passed H.R. 6441, a "clean" version of Congressman Blatnik's original proposal. An amended version passed the Senate on June 22, 1961. House and Senate conferees reached agreement in mid-July, and on July 14 the bill cleared Congress for the President's approval.

Public Law 87-88 makes six important changes in the Federal Water Pollution Control Act. Basically it:

- 1. Broadens and strengthens the Federal Government's enforcement powers.
- 2. Provides the basis for a greatly stepped-up program of waste treatment works construction.
- 3. Authorizes increased Federal support of State and interstate pollution control programs.
- 4. Authorizes an intensified program of research, with special emphasis on regional variations.
- 5. Establishes in law the principle of water storage (in planning and building Federal reservoirs) to maintain water quality during periods of low flow.
- 6. Transfers responsibility for the administration of the program from the Surgeon General of the Public Health Service to the Secretary of the Department of Health, Education, and Welfare.

It is expected that the new amendments to

Record Rate of Construction

American cities are spending more money to build sewage treatment plants this year than in any previous year in history, according to figures compiled by the Division of Water Supply and Water Pollution Control, Public Health Service.

During the first 9 months of 1961, cities awarded \$347 million to contractors for the construction of waste treatment facilities, including new plants and modernization or expansion of old ones, and for the building of receptor sewers. This compares with \$255 million awarded by the end of September 1960. Awards in previous 9-month periods were \$303 million in 1956, \$264 million in 1957, \$290 million in 1958, and \$287 million in 1959.

If construction continues at present rates through December, the amount of awards for calendar year 1961 will be substantially greater than \$400 million, a record figure.

From 1956, when the Federal Water Pollution Control Act was passed, through November 1961, contract awards for construction of sewage treatment facilities have totaled \$1.5 billion for 3,133 projects. The Federal Government has contributed \$257 million toward these projects.

the law will result in a greatly increased national effort, at all levels of government, to protect our nation's precious water resources.

Enforcement To Abate Pollution

Fifteen Federal enforcement actions have been taken since 1956. Twenty-three States and the District of Columbia have been parties to these actions. They involve some 250 municipalities and about the same number of industrial plants. Large metropolitan areas, such as New York City, St. Louis, the Kansas City area, and Portland, Oreg., and many major corporations have been covered in these actions. More than 4,000 miles of 12 major water bodies are affected. These Federal enforcement actions have had important secondary benefits also since many other communities and industries in the vicinity of cities involved in enforcement cases have been stimulated to proceed with construction of treatment facilities on their own initiative.

Authority for Federal action under the 1956

act was limited to cases involving pollution of interstate waters when such pollution endangered the health or welfare of persons in a State other than that in which the discharge originated.

This was an extremely limited jurisdiction. In the first place, of the estimated 26,000 water bodies in the United States, only an estimated 4,000 are interstate. Excluded from enforcement jurisdiction were the greater part of the Great Lakes and their tributaries: the coastal waters of the nation; many important coastal streams; intrastate water bodies such as the Detroit River, and all rivers, streams, lakes, and coastal waters of Alaska, Hawaii, and the Virgin Islands and Puerto Rico. International boundary streams such as the St. Lawrence, Niagara, lower Colorado, and Rio Grande Rivers were unprotected by this act and so were international streams flowing across the northern and southern borders of the United States, such as the Red River of the North, Lake Champlain, the Souris and Riviere Rivers, and the Flathead and Kootenai Rivers. The Missouri River from the Kansas State line to a point above St. Louis was not protected, nor was the greater part of the Hudson River and reaches of the Tennessee, Columbia, Colorado, and Merrimack Rivers.

To correct this situation, the 1961 amendments expand Federal enforcement authority to include not only interstate streams but, in addition, all navigable water bodies of the United States including coastal waters.

Secondly, as stated above, only pollution having an interstate effect was subject to abatement under the 1956 law.

As stated in the House committee report, "The effect of this limitation was to require Federal enforcement officials to trace the noxious effects of some polluter's discharge through the discharges of often hundreds of other polluters to some point in another State where the effect could be segregated from its host of acquired companions and found to endanger the health or welfare of persons. The enforcement process was intrinsically slow, expensive, and far less efficient than possible."

To correct this situation, Federal enforcement action to abate intrastate pollution was

authorized. Federal action in an intrastate case can be initiated, however, only at the request of the Governor of the State. The Secretary in initiating a requested intrastate action must decide whether the effects of the intrastate pollution on legitimate water uses are sufficiently significant to warrant the application of Federal powers. Already two States, Washington and Michigan, have taken advantage of this new provision.

For the first time, a request for Federal action to abate interstate pollution may be initiated by a municipality if the request has the concurrence of the Governor and the water pollution control agency of the State in which the municipality is located.

The existing three-stage enforcement procedures—conference, public hearing, and court action—are unchanged except that the Secretary may ask the Attorney General to initiate court action after a public hearing without State consent or request. The Secretary is required, however, to have the written consent of the Governor of the State before recommending Federal court action to the Attorney General in an intrastate case.

In addition, pollution discharges from Federal installations will be taken into account at the conference and hearing stages of an enforcement procedure.

Construction Grants

Federal grants to municipalities to assist them in the construction of waste treatment facilities were authorized by the 1956 Federal Water Pollution Control Act. An individual grant to a community was limited to 30 percent of the cost of construction, or \$250,000, whichever was the lesser. Appropriations of \$50 million annually up to an aggregate of \$500 million were authorized for construction grants. From 1956 through June 1961 contract awards for construction of waste treatment plants averaged \$360 million annually, a 62-percent increase over the previous 5-year average. The 2,700 projects which received Federal assistance under the 1956 legislation will serve 27 million people and will improve the quality of water in 33,000 miles of streams. These projects cost a total of \$1.3 billion, toward

State allotments of Federal funds for construction of waste treatment facilities, fiscal years 1961-67

State	Fiscal year 1961 ¹	Fiscal year 1962	Fiscal year 1963 ²	Fiscal years 1964-67 ²
Total	\$50, 000, 000	\$80, 000, 000	\$90, 000, 000	\$100, 000, 000
Alabama	1, 122, 225	1, 698, 520	1, 910, 835	2, 123, 150
Alaska	426, 625	585, 560	658, 755	731, 950
Arizona	559, 675	981, 800	1, 104, 525	1, 227, 250
Arkansas	1, 007, 675	1, 484, 520	1, 670, 085	1, 855, 650
California	2, 048, 650	3, 981, 840	4, 479, 570	4, 977, 300
Colorado	630, 000	1, 038, 560	1, 168, 380	1, 298, 200
Connecticut	619, 425	1, 035, 720	1, 165, 185	1, 294, 650
Delaware District of Columbia	343, 175 450, 650	559, 800 634, 080	$629,775 \mid 713,340 \mid$	699, 750 79 2 , 600
	,	,	,	•
Florida	900, 350	1, 785, 240	2, 008, 395	2, 231, 550 2, 206, 650
Georgia Hawaii	$\begin{bmatrix} 1, 126, 950 \\ 532, 725 \end{bmatrix}$	$\begin{bmatrix} 1,765,320 \\ 796,040 \end{bmatrix}$	$1,985,985 \\ 895,545$	995, 050
Idaho	588, 925	919, 240	1, 034, 145	1, 149, 050
Illinois	1, 755, 700	2, 739, 760	3, 082, 230	3, 424, 700
Indiana	1, 048, 825	1, 673, 480	1, 882, 665	2, 091, 850
Iowa	886, 425	1, 302, 800	1, 465, 650	1, 628, 500
Kansas	752, 575	1, 167, 480	1, 313, 415	1, 459, 350
Kentucky	1, 078, 150	1, 575, 960	1, 772, 955	1, 969, 950
Louisiana	967, 900	1, 572, 680	1, 769, 265	1, 965, 850
Maine	638, 900	989, 320	1, 112, 985	1, 236, 650
Maryland	759, 500	1, 269, 240	1, 427, 895	1, 586, 550
Massachusetts	1, 116, 625	1, 695, 760	1, 907, 730	2, 119, 700 2, 900, 400
Michigan	$egin{array}{c c} 1,417,500 \\ 930,325 \end{array}$	2, 320, 320 1, 442, 880	$\begin{bmatrix} 2,610,360 \\ 1,623,240 \end{bmatrix}$	1, 803, 600
Minnesota Mississippi	1, 173, 750	1, 720, 480	1, 935, 540	2, 150, 600
Missouri	1, 059, 775	1, 604, 160	1, 804, 680	2, 005, 200
Montana	528, 600	822, 600	925, 425	1, 028, 250
Nebraska	677, 575	993, 320	1, 117, 485	1, 241, 650
Nevada	358, 225	571, 920	643, 410	714, 900
New Hampshire	532, 775	827, 000	930, 375	1, 033, 750
New Jersey	1, 116, 575	1, 857, 200	2, 089, 350	2, 321, 500
New Mexico	588, 800	969, 760	1, 090, 980	1, 212, 200 5, 249, 350
New York	2, 740, 475	4, 199, 480	4, 724, 415 2, 190, 825	2, 434, 250
North CarolinaNorth Dakota	1, 268, 900 638, 525	$\begin{bmatrix} 1,947,400 \\ 993,440 \end{bmatrix}$	1, 117, 620	1, 241, 800
Ohio	1, 664, 900	2, 717, 720	3, 057, 435	3, 397, 150
Oklahoma	856, 400	1, 287, 520	1, 448, 460	1, 609, 400
Oregon	662, 775	1, 039, 200	1, 169, 100	1, 299, 000
Pennsylvania	2, 099, 125	3, 101, 520	3, 489, 210	3, 876, 900
Rhode Island	544, 475	830, 400	934, 200	1, 038, 000
South Carolina	1, 034, 425	1, 576, 800	1, 773, 900	1, 971, 000
South Dakota	646, 400	999, 760	1, 124, 730	1, 249, 700
Tennessee	1, 121, 875	1, 698, 000	1, 910, 250	2, 122, 500
TexasUtah	1, 717, 925 592, 275	2, 824, 320 940, 720	3, 177, 360 1, 058, 310	3, 530, 400 1, 175, 900
		,	, ,	
Vermont	545, 025	867, 280	975, 690	1, 084, 100
Virginia Washington	1, 035, 450 775, 325	1, 629, 960 1, 232, 440	1, 833, 705 1, 386, 495	2, 037, 450 1, 540, 550
West Virginia	867, 675	1, 232, 440 1, 232, 480	1, 386, 540	1, 540, 600
Wisconsin	987, 225	1, 524, 440	1, 714, 995	1, 905, 550
Wyoming	452, 975	712, 400	801, 450	890, 500
Guam		1, 255, 920	1, 412, 910	1, 569, 900
	1 150 005		1 077 075	0 107 750
Puerto Rico Virgin Islands	$egin{array}{c c} 1,178,925 \\ 823,375 \end{array}$	1, 758, 200 1, 248, 240	1, 977, 975 1, 404, 270	2, 197, 750 1, 560, 300

Appropriation was for \$45 million, but the appropriation act provided that allotments to States be based on the authorized \$50 million.
State entitlement based on population and income used in fiscal year 1962 allotment.

110 **Public Health Reports**

which the Federal Government contributed \$225 million. Thus, each Federal grant dollar was matched by \$4.80 in local funds.

Despite these significant increases in the construction of pollution abatement facilities, the nation's needs were not being met. To meet the needs of our growing population, to replace obsolete facilities, and to reduce the present backlog of more than 5,000 needed facilities will require an annual expenditure of \$600 million over the next 10 years.

To stimulate this necessary construction, the Congress at President Kennedy's request broadened the construction grants program. The 1961 amendments:

- 1. Authorize substantial increases in the amounts to be appropriated for construction grants: \$80 million for fiscal year 1962; \$90 million for fiscal year 1963; and \$100 million annually for the succeeding 4 fiscal years.
- 2. Increase the maximum amount of the individual grant from \$250,000 to \$600,000, or 30 percent of the cost of construction, whichever is the lesser. (A grant in excess of \$250,000 may not be made, however, until all pending qualified applications and those filed for 1 year after enactment of the new law have first received grants.)
- 3. Provide for reallocation of funds unobligated by a State within 18 months after allotment, to insure the full utilization of grant funds. The reallocation shall be to those States having approved projects for which grants have not been made because of a lack of funds. Before reallocating a State's unused funds, if the Secretary finds that the need for a project in a community in that State is due in part to a Federal institution or Federal construction activity, he may make an additional grant from that State's reallocable funds to the affected community, which will reflect an equitable contribution for the need caused by the Federal institution or construction activity.
- 4. Encourage communities to join together in constructing a joint project to serve their common needs. An individual grant may be made to each participating community, within the limitations applicable to an individual grant, based on its pro rata share of the total cost of construction with an overall limitation for the combined project of \$2,400,000.

5. Apply Davis-Bacon Act provisions in regard to rates of wages paid to laborers and mechanics employed by contractors or subcontractors on grant-assisted projects.

Program Grants

Authority was conferred by the 1956 law to make program grants for 5 years to State and interstate agencies. These grants were to assist the agencies in meeting costs of establishing and maintaining adequate water pollution prevention and control programs, including costs of training personnel and administering programs in accordance with plans subject to review and approval by the Surgeon General. The annual authorization was \$3 million, but the first annual appropriation was \$2 million. This was increased to \$3 million for each fiscal year from 1958 through 1961.

Program grants to State and interstate agencies in the past 5 years have improved and strengthened their water pollution control programs and have stimulated increased State appropriations. These appropriations increased from \$4.2 million for fiscal year 1956 to \$7.6 million for fiscal year 1960.

State and interstate agencies have increased their technical and supporting staffs by nearly 50 percent. They have been able to initiate or expand population surveys, research, and basic data collection, and carry on more aggressive enforcement of State laws. The grants have also made possible the purchase of major items of field and laboratory equipment needed to support the expanding programs.

The 1961 amendments provide for improvement and extension of the State and interstate programs by increasing to \$5 million the amount authorized for the annual appropriation and extending the authority for making the grants for 7 years, to June 30, 1968.

Effective July 1, 1962, each State plan submitted as a prerequisite to receiving program grants is required to include the criteria used by the State in determining priority of projects for Federal grants for construction of municipal treatment works.

Research

The 1956 law broadened the Government's authority to conduct and support research. It

included prevention as well as control of water pollution and provided authority to make grants to public and private agencies including universities and other qualified institutions. These grants were authorized for research and training projects, demonstrations, and research fellowships.

Significant progress has been made under this law through the application of the engineering, chemistry, physics, microbiological, biological, and related sciences to questions of water supply and pollution. An example is a greatly enlarged arsenal of tools now available for detecting new synthetic contaminants and their pollution characteristics and effects. Another is the initiation of a major research effort to develop entirely new processes for removing much more of the pollutants from waste waters than is possible by existing methods. The need for this latter project is urgent in view of increasing pollution and the need to reuse water.

To further stimulate these programs, President Kennedy, in his 1961 message, called for an "intensive and broadened research effort to determine the specific sources of water pollution and their adverse effects upon all water uses; the effects upon the health of people exposed to water pollution; and more effective means of preventing, controlling, or removing the contaminants—including radioactive matter—that now pollute our rivers and streams so that the water may be safely used."

The 1961 amendments specifically authorize and direct the development and demonstration of practicable means of sewage treatment, improved methods and procedures to identify and measure pollution effects on water uses, and methods and procedures for evaluating effects on water quality and uses of augmented streamflow.

Establishment of a minimum of seven field laboratory and research facilities to be located in specified areas is also directed by the new law. These long-needed laboratories will support expanding programs in comprehensive program development, special field study projects on specific problems, basic data, and enforcement, and will make possible much-needed increases in technical assistance to State and local agencies and in connection with projects and other Federal water resources agencies. Presently

obstructive factors, such as distance and reliance on facilities of others, will be overcome through establishment of these new laboratories.

In addition, the new law directs a continuing study of the quality of the waters of the Great Lakes. The Great Lakes constitute the largest single source of fresh water in this hemisphere. Their protection from pollution caused by population and industrial growth and increased shipping is essential to the health of our people and the economy.

Water Quality Control

All of the programs conducted under the 1956 and 1961 laws have as their purpose the protection and maintenance of water quality for all legitimate uses.

The 1961 amendments place additional emphasis on water quality control considerations by authorizing inclusion of storage for regulating streamflow for water quality control purposes in any federally constructed reservoir. Releases for streamflow regulation and storage are to supplement, and not substitute for, adequate treatment and other methods of controlling waste at the source. The advice of the Secretary is required in determining the need for and the value of storage for this purpose, and his views are to be included in any report or presentation to the Congress proposing authorization or construction of any reservoir which is to include such storage. In effect, this Department's concern for maintaining water quality how extends into the entire field of water resources conservation and development.

Administration of the Program

In his message to the Congress in February 1961, the President proposed the "establishment of a special unit within the Public Health Service under the Department of Health, Education, and Welfare, where control measures to prevent and limit pollution of our water will be developed."

Twenty-five separate bills were introduced in the House early in 1961 authorizing the establishment of a Federal Water Pollution Control Administration in the Department to administer the expanded pollution control program advocated by the President, the Department, and the bill's sponsors. (Similar legislation cosponsored by nine Senators was introduced in the Senate.)

At the request of Secretary Ribicoff, Congress deleted the provisions relating to a new operating agency for pollution control, but transferred from the Surgeon General of the Public Health Service to the Secretary of the Department complete responsibility for the administration of the act. The Secretary had asked for "time to take a complete fresh look at the situation and the various proposals for dealing with it."

To prevent any impairment of the program in the meantime, however, the Secretary authorized the Surgeon General to continue to administer the program and to exercise substantially the same responsibilities as were vested in him prior to the 1961 amendments.

The Secretary named a departmental task force composed of senior members of his staff to study the status of the water pollution program and directed it to make recommendations as to the need for administrative changes to assure that the program is given the recognition and status necessary to carry out its mission.

That task force took into consideration the fact that the water pollution control program established in 1956 and strengthened by the 1961 amendments goes far beyond the usual public health legislation in that it assigns to the Department responsibility for controlling water pollution to conserve water for all uses—propagation of fish and aquatic life and wildlife, recreational purposes, industrial and agricultural (including irrigation) supplies, and other legitimate purposes, as well as public water supplies and protection of the public health.

The task force, therefore, recommended that an official on the highest policy level in the Department be designated as the Secretary's immediate representative in the administration of the Government's water supply and water pollution control program.

The task force also recommended that operational responsibilities continue in the Division of Water Supply and Water Pollution Control in the Bureau of State Services of the Public Health Service.

On November 16, 1961, Secretary Ribicoff designated Assistant Secretary James M. Quigley as his principal representative in matters relating to water supply and pollution control and to serve as chairman of the Water Pollution Control Advisory Board.

Mr. Quigley also will have responsibility for reviewing situations which might require Federal enforcement action and for recommending action to the Secretary. In addition, he will represent the Department on all interdepartmental and interagency matters affecting water supply and pollution control; review program activities; recommend steps designed to achieve vigorous and effective departmental action; assure balanced interest in water quality for all legitimate purposes; prepare and keep current a policy statement for guidance of all Department officials; and guide Department policy in program planning and other administrative procedures.

In announcing Mr. Quigley's appointment, the Secretary declared: "This will be the first time that a senior policymaking official of the Department has been directly involved in the administration of this extremely important program. This is an indication of the importance that this administration attaches to the need for the most effective action possible to keep this nation or any section of it from running out of usable water resources."

Summary

The Federal Water Pollution Control Act Amendments of 1961 establish the Department of Health, Education, and Welfare as a major water resource agency of the Federal Government. Six important changes in the law apply to enforcement of pollution abatement, expanded financing, support of State and interstate programs, research, the principle of storage in Federal reservoirs to maintain water quality in dry seasons, and raising responsibility for the program to the Cabinet level.

Three significant changes in enforcement extend Federal authority to all navigable waters, including coastal waters; permit initiation of Federal action by a municipality; and authorize Federal enforcement action against intrastate pollution.