# Highlights OF WATER POLLUTION ABATEMENT ACTIVITIES (1936—1969)



INTERSTATE SANITATION COMMISSION

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Highlights
of the
Interstate Sanitation Commission
Water Pollution Abatement Activities

(1936 - 1969)

# HIGHLIGHTS of the INTERSTATE SANITATION COMMISSION

## WATER POLLUTION ABATEMENT ACTIVITIES

(1936-1969)

### SUMMARY:

During this period, the Commission has issued 63 Commission orders with the timetables for the abatement of water pollution. Commission has gone to Court 12 times. All decisions were favorable to the Commission.

	1936	_1969_
Secondary Treatment Plants	2	47
Primary Treatment Plants	26	65
Less than Primary Treatment	18	16
	46	128

Flow Receiving Adequate Treatment

(Secondary)

2,250,000 GPD - 1,219,830,000 GPD

Total Flow Receiving Treatment 277,318,000 GPD - 2,199,020,000 GPD

There are seven Interstate Water Pollution Control Agencies in the United States. The Interstate Sanitation Commission is the only one having a plant sampling program to insure that the plants are being operated to meet requirements of treatment.

1936 - Before 1936 there were but 46 municipally-owned treatment plants. Approximately 4 percent of the total plants in service at that time were giving adequate treatment to the sewage being discharged. The total discharge for these 46 treatment plants was 277,318,000 gallons per day of which only 2,250,000 gallons per day were receiving adequate treatment, or less than one percent of the total treated. It is further estimated that 1,066,454,000 gallons per day were being discharged without any form of treatment. The Tri-State Compact was approved in New York State. The Compact had already been approved in New Jersey and had received the consent of Congress in 1935. The Commission held its first meeting on February 17, 1936, to organize and elect officers.

1937 - This is the year that classification of the Interstate Sanitation District Waters was begun and the majority of the waters were classified. The Elizabeth Joint Meeting Plant was completed.

- 1938 The classification of the Interstate Sanitation District Waters was completed. The first order of the Commission was issued on October 4, 1938, for a Joint Pollution Abatement Project by Union City, Weehawken, and West New York, New Jersey.
- 1939 Twenty-six sewage treatment plants had been completed or were under construction since the establishment of the Commission three years ago.
- 1940 Reports of the Water Pollution Survey sponsored by the Commission and carried on by the Works Project Administration were distributed this year. This study started in 1937.
- 1941 The State of Connecticut joined the Commission. Due to World War II, the construction of new sewage treatment facilities was halted.
- 1942 Bowery Bay, Coney Island and Hart-City Island Treatment Plants were completed in New York City.
- 1943 The war continued to influence abatement programs. New treatment works could not be built nor old ones modified. The Commission planned a report for a post-war works program. The Freeport and the Belgrave Sewer District Plants on Long Island and the Orangetown Sewer District No. 2 Plant and Jamaica Treatment Plant were completed.
- 1944 The Commission urged the municipalities to prepare plans and specifications to be prepared to begin construction as soon as conditions would permit.
- 1945 The Port Chester, New York Sewage Treatment Plant was completed and modifications to the Orchard Beach Plant in New York City were completed.
- 1946 The inability to provide labor and materials to build sewage treatment plants stopped nearly all construction in the Interstate Sanitation District during this year.
  - 1947 Six hearings were held and thirteen orders issued.
- 1948 The Commission entered its first two Court cases during this year; one against Carteret, New Jersey, and the other against the municipalities of Union City, Weehawken and West New York, New Jersey. The Commission issued an order against New York City.
- 1949 The Sing Sing Prison Plant in Ossining, New York, and the Melrose Plant in Sayreville, New Jersey, were completed. Orders were issued against 15 communities. Included were Bayonne, Jersey City, Elizabeth, Edgewater, Hoboken and Woodbridge in New Jersey; Peekskill, Long Beach, and Croton-on-Hudson in New York.

- 1950 The state of emergency declared by the President of the United States made it necessary for the Commission to re-evaluate its abatement program, since this would affect the availability of materials necessary for the construction of the treatment plants. Bridgeport, Connecticut, completed modification and expansion of its East Side Plant. West Haven, Connecticut, completed modification of its treatment plant.
- 1951 Construction was limited to four plants due to Federal control of materials. The first phase of the Industrial Waste Inventory, which has been underway since 1949, was completed. Nassau County District Plant No. 2, West Long Beach and Jones Beach Treatment Plants on Long Island were completed as well as the West Side Plant in Bridgeport, Connecticut. The 26th Ward Plant Project which changed to secondary treatment was completed.
- 1952 Treatment plants at Hunts Point, Owls Head, Rockaway and Port Washington, in New York State; Linden-Roselle, New Jersey, and Fairfield, Connecticut, were all completed during this year. This represents a total capacity of 314,000,000 gallons per day, which these plants are capable of treating. This is the year the Commission, in cooperation with the Corps of Engineers, started the Upper Harbor Survey to analyze the effects of sewage discharged through the Passaic Valley Sewage Treatment Plant.
- 1953 The Carteret Plant in New Jersey and the Port Richmond Plant in Staten Island were completed.
- 1954 Bayonne and Woodbridge New Jersey Treatment Plants were completed.
- 1955 New Rochelle and Freeport in New York and Kearny in New Jersey completed their treatment plants. The Commission completed studies on the control of cabin cruiser pollution. These studies were begun in 1953.
- 1956 The Oakwood Beach Sewage Treatment Plant in New York City was completed. The Glen Cove Treatment Plant was completed on Long Island. A water pollution survey of the Arthur Kill was made.
- 1957 This year the Commission issued a ten-year Consent Order against New York City to spend not less than \$22,000,000 a year and to meet a timetable for pollution abatement projects. In 1956, New York City was spending less than \$2,000,000 annually for pollution abatement. By 1966, New York City was spending several times the \$22,000,000 minimum and for that year it had a budget of \$150,000,000. An Industrial Waste Survey and an intensive water pollution survey of the Arthur Kill Area were made. The two Jersey City Treatment Plants were completed.
- 1958 A report on the Study of the Arthur Kill and a new method developed by the Commission Staff for analyzing data in tidal waters

was issued by the Commission. The Middlesex County Sewerage Authority and Hoboken Treatment Plants were completed. Additions to the Edgewater, New Jersey, plant were made.

1959 - The report on the Upper New York Harbor Survey which was conducted in 1958 was issued and predictions concerning water quality could be made for the first time with some degree of accuracy as far ahead as 1965 and 1970. An intensive survey of the East River was conducted this year. New Haven completed the enlargement of its Boulevard Sewage Treatment Plant. Some interceptors in the service area of the Newtown Creek Pollution Control Project were completed. Improvement of the Tallman's Island Treatment Plant was completed. The Rahway Valley Sewerage Authority finished a new outfall to the Arthur Kill.

1960 - A report was made on the East River Survey which was conducted in 1959. Additions and modifications to the Freeport Plant were completed. The design capacity of the Nassau County Sewage District No. 2 plant was increased from 27,000,000 to 60,000,000 gallons per day. A new Gulf Pond Plant in Milford, Connecticut was completed. The new Orangetown Sewer District No. 2 Plant was completed and put into operation. Westport, Connecticut, and Yonkers, New York, Treatment plants were put into operation.

1961 - Additional interceptors were completed on the Newtown Creek Pollution Control Project. The Commission coordinated a Joint Model Study which was undertaken by the New Jersey State Department of Health, New York State Water Pollution Control Board and New York City Department of Health and made use of the U. S. Army Corps of Engineers Model in Vicksburg. The report was completed in 1963. The Commission commenced one Court Proceeding for the abatement of pollution, held two public hearings which were followed by the issuance of orders and participated as a Conferee in the Conference called by the U. S. Public Health Service pertaining to the Raritan Bay waters. Diversion of Fort Lee wastes to the Bergen County Sewage Treatment Plant was completed. Nassau County Sewer District No. 1 Plant was completed.

1962 - North Bergen completed its treatment plant which serves the portion of the town that discharges into the Hudson River. The results of intensive investigations and an analysis of data led to the determination of the assimilative capacity of the Arthur Kill and the issuance of a Report on the Treatment Requirements along the Arthur Kill. Rutgers made a study for the Commission and found the cause of the bad taste in fish that had been caught in the Raritan and Lower Bays. The abatement of pollution in the Arthur Kill should eliminate this taste in fish.

1963 - Based on the Commission's Report of 1962, New Jersey issued orders to six municipal sewage treatment plants and 24 industries along the Arthur Kill to provide secondary treatment. These orders were issued for non-recreational water areas before it became popular

to have secondary treatment in tidal waters. The Second Session of the Conference on Raritan Bay was held and it was agreed by all the Conferees that the States of New Jersey and New York and the Interstate Sanitation Commission had an active and effective program for control and abatement of pollution of Raritan Bay waters. A continuous water quality monitor was installed in the Arthur Kill for the purpose of telemetering essential data to the Commission office. A study of Raritan Bay waterway was initiated by the Commission to determine the extent of the dissolved oxygen deficiency problem. The extension to the Jamaica Sewage Treatment Plant and the Hunts Point Treatment Plant, which was expanded to treat 150,000,000 gallons per day, were completed. The Port Jefferson Treatment Plant was expanded to improve primary treatment as a result of the Commission's court case against Port Jefferson.

1964 - Greenwich, Connecticut's new secondary plant, which replaced four older plants, was put into operation. Tallman's Island Treatment Plant construction, which increases its design flow from 40,000,000 to 60,000,000 gallons per day, was completed. The new Oyster Bay secondary treatment plant was completed. A continuous water quality monitor was installed on the lower East River for continuous analysis of data telemetered to the Commission office for observation and recording on a strip chart. At the urging of the Commission, the States agreed that chlorination be required in all plants in the Upper New York Harbor area and should start chlorinating on May 15, 1967, which is the completion date of the Newtown Creek Treatment Plant.

1965 - The Commission has urged the States for several years to provide more than primary treatment. During the year, the States agreed that secondary treatment be required on all Commission waters. The States are obtaining timetables so that the plants may proceed to more advanced treatment of their wastes. In September of this year, the first Conference on the Hudson River was called. Conferees agreed to this policy of secondary treatment and that an active program existed among the States of New York and New Jersey and the Interstate Sanitation Commission. New secondary units were placed in operation at the Belgrave Sewer District Plant on Long Island. The new Mamaroneck Plant was placed in service to replace an old screening plant. The Middlesex County Sewerage Authority increased its treatment capacity from 52,000,000 to 78,000,000 gallons per day. New additions were completed on the Hunts Point Pollution Control Project with an increased design capacity of 150,000,000 gallons per day. The Jamaica Bay Plant was expanded to 100,000,000 gallons per day. Port Chester diverted its flow to the new treatment plant.

1966 - The Commission completed its court case against Port Chester which received a Court Order to remove industrial wastes within four months and provide the necessary treatment to meet the Commission standards within two years.

1967 - The Third Conference on Raritan Bay was called in June of

this year and one of the conclusions was that considerable progress had been made toward abating this pollution problem. It was agreed by all the Conferees that a minimum of 80 percent removal of biochemical oxygen demand would be required at all times. The schedule proposed by New York and New Jersey was accepted by the Conferees for the abatement of the remaining pollution. The majority of the wastes will be treated during the period 1967 to 1970 and the small amount of remaining wastes will be undergoing treatment before 1972. Second Conference on the Hudson River was held in September of this The Conferees agreed that considerable progress had been made toward abatement of pollution problems and that the programs under way will abate and control this pollution. It was agreed to provide secondary treatment and the timetable submitted by the states provides for all the abatement to be completed not later than 1972. Newtown Creek Treatment Plant was completed. It cost over \$165,000,000 and was designed to treat over 300,000,000 gallons per day. Newtown Creek will treat approximately 140,000,000 gallons per day until the pumping station, which will pump wastes from the lower part of Manhattan, is completed in 1970. New Jersey has taken to court some communities which did not meet the chlorination requirement as scheduled for the summer of 1967. It is expected that all treatment plants in the Upper Harbor and Lower Hudson area will be chlorinating by the summer of 1968.

1968 - A great deal of planning and construction was done to provide a minimum of 80 percent biochemical oxygen demand removal of all wastewater effluents discharging to District Waters. More than \$945,756,453 was designated to be spent for water pollution control work in the Interstate Sanitation District for 1,775,160,000 gallons per day of wastewater now being discharged.

Many treatment facilities in the District were ordered to upgrade to secondary treatment.

In April 1968, the Commission sponsored an Interstate Conference on Boat Pollution in which representatives of state, local, federal and interstate agencies and other persons with interests in boating participated.

1969 - Many treatment plants in the Interstate Sanitation District increased their capacities and upgraded from primary to secondary treatment. A number of large projects are under way to upgrade and improve treatment plant facilities in all three states, and design stages for others are in the planning.

The Commission conducted an Industrial Waste Survey and the information was placed on punch cards for quick retrieval.

The Interstate Sanitation Commission moved its laboratory facilities to 353 West 48th Street and added a number of new instruments which will permit a more complete analysis of industrial and sewage treatment plant wastes. It also acquired a new water pollution mobile unit which permits on-the-spot analyses at industrial

and sewage treatment plants. The mobile laboratory is also being used in a sewage treatment operator training program.

At two Federal Conferences during 1969 on the Hudson River, the Interstate Sanitation Commission was designated to make a study of combined sewer overflows in the Hudson River Conference area. The States of New York and New Jersey will conduct the study in that portion of the Conference area outside the Interstate Sanitation District. These studies are to be the first stage in the development of a remedial program.

The Commission, in cooperation with the states, in a little over thirty years, has increased the wastewater flow receiving secondary treatment from 2,250,000 gallons per day to the present 1,219,830,000 gallons per day. All wastes, approximately 2,200,000,000 gallons per day, should be receiving secondary treatment by 1975.