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STANDARD FORM NO. 1

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IN THE

Supreme Court of the United States

STATE OF WISCONSIN, STATE OF
MINNESOTA, STATE OF OHIO, and
STATE OF PENNSYLVANIA,

*Complainants,**vs.*

STATE OF ILLINOIS and THE SANITARY
DISTRICT OF CHICAGO,

Defendants.

STATE OF MISSOURI, STATE OF KEN-
TUCKY, STATE OF TENNESSEE, STATE
OF LOUISIANA, STATE OF MISSISSIP-
PI, and STATE OF ARKANSAS,

Intervening Defendants.

No. ~~8~~ 3
Original.

STATE OF MICHIGAN,

*Complainant,**vs.*

STATE OF ILLINOIS and THE SANITARY
DISTRICT OF CHICAGO, et al.,

Defendants.

No. ~~8~~ 4
Original.

STATE OF NEW YORK,

*Complainant,**vs.*

STATE OF ILLINOIS and THE SANITARY
DISTRICT OF CHICAGO, et al.,

Defendants.

No. ~~9~~ 5
Original.

**SEMI-ANNUAL REPORT OF THE SANITARY DIS-
TRICT OF CHICAGO OF JANUARY 1, 1936, MADE
PURSUANT TO DECREE OF APRIL 21, 1930.**

IN THE
Supreme Court of the United States

Nos. 5, 8 AND 9, ORIGINAL.

OCTOBER TERM, 1935.

STATE OF WISCONSIN, STATE OF
MINNESOTA, STATE OF OHIO, and
STATE OF PENNSYLVANIA,

Complainants,

vs.

STATE OF ILLINOIS and THE SANITARY
DISTRICT OF CHICAGO,

Defendants.

STATE OF MISSOURI, STATE OF KEN-
TUCKY, STATE OF TENNESSEE, STATE
OF LOUISIANA, STATE OF MISSISSIP-
PI, and STATE OF ARKANSAS,

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No. 5,
Original.

STATE OF MICHIGAN,

Complainant,

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STATE OF ILLINOIS and THE SANITARY
DISTRICT OF CHICAGO, et al.,

Defendants.

No. 8,
Original.

STATE OF NEW YORK,

Complainant,

vs.

STATE OF ILLINOIS and THE SANITARY
DISTRICT OF CHICAGO, et al.,

Defendants.

No. 9,
Original.

**SEMI-ANNUAL REPORT OF THE SANITARY
DISTRICT OF CHICAGO OF JANUARY 1, 1936,
MADE PURSUANT TO DECREE OF APRIL
21, 1930.**

Pursuant to provisions of paragraph numbered 5 of the Decree in the above entitled causes, entered on April 21, 1930, the Defendant, The Sanitary District of Chicago, hereby makes its semi-annual report of January 1, 1936, as follows:

CONSTRUCTION PROGRAM.

In the semi-annual report of July 1, 1935, the status of completed work in the sewage treatment construction program involved in this case was stated to be on June 1, 1935, as follows:

TABLE 1.

COMPLETED WORK AS OF JUNE 1, 1935.

Calumet Project	\$ 25,827,668.30
North Side Project.....	37,126,907.60
West Side Project.....	49,324,888.32
Southwest Side Project.....	458,026.27
West-Southwest Treatment Plant.....	362,936.82
Miscellaneous Plants and Sewers.....	603,779.93
Chicago River Controlling Works.....	53,415.74
Total.....	<u>\$113,757,622.98</u>

TABLE 2.

FUTURE WORK AFTER JUNE 1, 1935.

Calumet Project	\$ 8,734,000.00
North Side Project.....	5,000,000.00
West Side Project.....	4,117,000.00
Southwest Side Project.....	39,672,000.00
West-Southwest Treatment Plant.....	33,621,000.00
Miscellaneous Plants and Sewers.....	1,992,000.00
Chicago River Controlling Works.....	3,200,000.00
Total.....	<u>\$96,336,000.00</u>

During the interim of six months between the date of the last report and the present report a considerable amount of construction work has been accomplished on the Calumet, the West Side and the Southwest Side Sewage Treatment Projects and a reasonable start has been made on plans for the extension of the North Side Treatment Works. Studies, estimates and preliminary plans have been made for the Chicago River Control Works, an application for a permit to construct the same has been

filed with the United States District Engineer in Chicago and a public hearing has been held on this matter.

Calumet Project. The following contracts, mentioned in the last semi-annual report, have been completed: Calumet Pumping Station and Blower House; Aeration Tanks, Operating Galleries, Final Settling Tanks, etc.; Preliminary Settling Tanks, Sludge Concentration Tanks, Screen House, Meter Vault, etc.; Blower Units; Connecting Conduits between old Calumet pumping station and new treatment plant; and the Harvey Sewer.

Construction was continued on contracts for: Sludge Disposal Building and Miscellaneous Work, now 75 per cent completed; Sludge Disposal Equipment and piping, now 48 per cent completed; Electrical Equipment, now 10 per cent completed; and Underground Duct Lines, now 81 per cent completed. A contract for roadways, grading, drainage, lighting, etc., was awarded September 5, 1935 and this work is now 50 per cent completed.

The Calumet Sewage Treatment Works Extension was placed in operation December 3, 1935, treating the sewage of approximately 250,000 people by the Activated Sludge process. The contracts yet to be completed are all in connection with the sludge disposal plant (by dewatering and incineration) and roads and grading. It is expected that all these contracts will be completed before March 1, 1936. Meanwhile the excess sludge will be stored in the tanks of the old Calumet treatment plant or lagooned in the ash disposal area.

Arrangements were made, in an agreement with the Federal Emergency Administration of Public Works, dated September 21, 1935, for financing the construction of four additional sewers in the Calumet region, namely: South Park Avenue, Colfax Avenue, Stony Island Avenue and Calumet City. Plans and specifications have been prepared for the South Park Avenue sewer and bids for the construction of the same were received November 7, 1935, but were returned unopened because of a dispute over labor rates on sewer work. This work was re-advertised and bids for the construction were received December 26, 1935. Plans for the Colfax Avenue Sewer are practically completed. Surveys have been completed for the Stony Island Avenue and Calumet City sewers and work started on the plans.

Three other sewers in the Calumet area will still remain to be constructed whenever finances become available. These are the Blue Island Intercepting, the Evergreen Park and the California Avenue-Oak Forest Sewers.

North Side Project. In an agreement with the Federal Emergency Administration of Public Works, dated September 21, 1935, arrangements were made for financing the construction of a portion of the North Shore Intercepting Sewer, known as the Cherry Street Sewer, of certain sewer siphons under the North Shore Channel and of an extension of the North Side Treatment Works. Bids were received for the construction of the Cherry Street Sewer, December 26, 1935. Plans and specifications for additional final settling tanks and sludge removal

mechanisms for the North Side Treatment Works will be completed within the next month.

West Side Project. The following sewer contracts, mentioned in the last semi-annual report to the Court, have been completed: West Side Sewer Contract 6, Contract 7, Contract 10. West Side Sewer Contract 4 is now 98 per cent completed and Contract 9 is now 92 per cent completed. It is expected that these contracts will be completed within the next two months, thereby completing the main West Side Intercepting Sewer. Through West Side Sewer Contracts 1, 2 and 3 and from Laramie Avenue Sewer, the sewage of approximately 695,000 persons is taken to the West Side Treatment Works. With the completion of Contract 4, the remaining sewage from the areas served by West Side Sewer, Contracts 4 to 10, inclusive, involving approximately 600,000 people, can be taken to the plant for treatment.

Certain collateral intercepting sewers remain to be constructed to make the West Side system complete. Arrangements were made, in an agreement with the Federal Emergency Administration of Public Works, dated September 21, 1935, for financing the construction of three of these sewers, namely: Goose Island, Halsted Street and Harrison Street to Fourteenth Street Sewers. Surveys have been completed for all these sewers; plans have been started for the Goose Island and Halsted Street Sewers and plans and specifications have been completed for the Harrison Street to Fourteenth Street Sewer. The taking of bids for this latter sewer is being delayed by difficulty in acquiring right-of-way.

The remaining work in the West Side Project, dependent upon future financing, consists of certain collateral sewers and sewer connections in the area adjacent to the Main Drainage Channel west of Western Avenue and of facilities for the secondary (or complete) treatment of sewage at the West Side works.

West-Southwest Treatment Plant. Construction was continued on the following contracts, mentioned in the last semi-annual report to the Court: Aeration Tanks, Operating Galleries, Final Settling Tanks, etc., now 39 per cent completed; Electrical work in connection with Aeration Tanks, etc., now 8 per cent completed; Substructure of Pumping Station and Blower House, now 99 per cent completed. The fabrication of the following equipment was continued: Steam Turbine driven Pumping Units, now 40 per cent completed; Steam Turbine driven Blower Units, now 43 per cent completed; Sludge Removal Mechanisms, now 25 per cent completed; Venturi Meters, now 86 per cent completed; Large Valves, now 50 per cent completed.

A contract for the structural steel work of the Pumping Station and Blower House was awarded November 21, 1935. Bids were received for furnishing Steam Turbine driven Electric Generators, for furnishing Condensers, for furnishing Electric Transformers, for furnishing Feed Water Heaters December 5, 1935. Plans are practically completed for the Superstructure (Architectural Work) of the Pumping Station and Blower House and for the Influent and Effluent Conduits, etc. Plans are well under

way for the Piping and Auxiliary Equipment in the Pumping Station and Blower House.

Progress on the Sludge Disposal Plant (Sludge Dewatering and Incinerating Plant) has been unavoidably slow. Two distinct processes and types of equipment for dewatering and incinerating sludge had been the subject of consideration by the Sanitary District engineers and the Engineering Board (PWA) at the time of the last semi-annual report to the Court. Both methods contemplated the combining of sludge incineration with steam power generation for all plant power requirements. This Engineering Board (PWA) met September 11-13, 1935 to review this and other matters and requested a comprehensive report on construction and operating cost of both types. Such report was prepared and submitted to the Engineering Board (PWA) on October 3, 1935. The type of dewatering and incinerating equipment developed and recommended by engineers of the Sanitary District at the West Side Experimental Plant was then approved (October 5, 1935) and the Sanitary District was directed to proceed with the design of a sludge disposal plant (dewatering and incineration process) utilizing this type and process, of sufficient capacity to handle the sludge from the North Side Plant and from the Southwest Plant with an average sewage flow of 400 M. G. D. Plans and specifications for boilers and for air preheaters have been practically completed and advertisements for bids for furnishing this equipment will be published as soon as approval of the details can be obtained from representatives of the Public Works Administration. It is planned to contract for the

purchase of all the major equipment for the sludge disposal plant by April, 1936 in order that the building may be placed under contract in the early summer of 1936.

Southwest Side Project. The contract for the construction of Section 1 of the Southwest Side Intercepting Sewer including the Screen Chamber for the Southwest Pumping Station was awarded July 11, 1935 and actual construction was started July 23, 1935, this contract now being 9 per cent completed. Work was continued on the construction of contract Section 2, now 68 per cent completed and on contract Section 3, now 34 per cent completed. The contract for the construction of Section 4 (from Western Avenue to Racine Avenue) was awarded August 15, 1935 and actual work started September 16, 1935, the contract now being 3 per cent completed. Bids for the construction of Section 5 of the Southwest Side Intercepting Sewer were received October 31, 1935, but were returned unopened because of the pending dispute relative to an increase in labor rates on sewer work. This work was re-advertised and bids were received December 19, 1935. Plans for contract Section 6 are about 50 per cent completed. Considerable progress has been made on the plans for connections and collateral work of the Southwest Side Intercepting Sewer.

In an agreement with the Federal Emergency Administration of Public Works, dated September 21, 1935, arrangements were made for financing the construction of the Upper Des Plaines Sewer, the West Towns Sewer and a portion of the Argo Sewer from the Southwest Treatment Plant to Narragan-

sett Avenue. Bids were taken October 17, 1935 for the construction of ten miles of the Upper Des Plaines Sewer from Dempster Street to North Avenue. These bids were rejected November 6, 1935, as being too high, the work was re-advertised November 20, 1935 and bids considerably lower were received December 5, 1935. Three contracts, for Sections 3, 4 and 6 of this sewer, were awarded December 12, 1935. Plans for Sections 1 and 2 of the Upper Des Plaines Sewer, about five miles from North Avenue to Roosevelt Road are about 50 per cent completed. Plans for Sections 2 and 3 of the West Towns Sewer, from Roosevelt Road to the Main Drainage Channel are approximately 85 per cent completed.

Control Works, Chicago River. In an agreement with the Federal Emergency Administration of Public Works, dated September 21, 1935, arrangements were made for financing the construction of Control Works for the Chicago River, the sum of \$3,000,000 being allocated for this purpose. The Engineering Board (PWA) on September 13, 1935, requested that estimates be furnished for four different types of flood gates which could be placed in the Chicago River east of Michigan Avenue, or east of the most easterly sewer outlet. These estimates were furnished on October 3, 1935 and on October 5, 1935 the Engineering Board recommended that an application be filed with the United States District Engineer, in Chicago, for a permit for the construction of two sets of flood gates in the Chicago River, spaced about 800 feet apart. Each set of gates, similar to standard lock gates, was to be placed in an opening 110 feet wide in a wall, or dam, across the river. The gates would

be closed only in times of flood, or threatened river reversal, and even when closed, boats could pass, since the section of the river between the gates could be used as a lock.

An application was filed with the War Department, October 10, 1935, for a permit for the construction of flood gates, or control works, in the Chicago River. At a public hearing before the United States District Engineer in Chicago, November 15, 1935, considerable opposition was expressed to the construction of such gates, particularly as to the location first designated. Suggestion was made that a comprehensive harbor plan, including control works, which had been worked out by the Chicago Plan Commission be substituted for the proposed control works. All the construction in the comprehensive harbor plan, estimated to cost \$4,800,000, would be in the lake east of the Outer Drive Bridge. The flood gates in the Chicago River were estimated to cost not more than \$1,000,000, including some allowance for land and dock damages. The control works portion of the comprehensive harbor plan were estimated to cost about \$1,000,000 but no method of financing the cost of the remaining construction was suggested. This matter received further consideration from the Engineering Board (PWA) December 13-14, 1935 and December 19-20, 1935 and a modified plan is being prepared to be submitted to the War Department.

Activated Sludge Patent Suit. In the suit of Edgar C. Guthard, Activated Sludge, Ltd., and Activated Sludge, Inc. versus The Sanitary District of Chicago, in the United States District Court for the Northern District of Illinois, Eastern Division (In Equity No.

4280), mentioned in the last report to the Court, the record is being prepared for the appeal to the United States Circuit Court of Appeals for the 7th Circuit.

On November 26, 1935, all the patents held valid by Judge Lindley in the above-mentioned suit expired.

In the litigation at Milwaukee, the United States Circuit Court of Appeals heard arguments on November 8, 1935 in the suit brought by Activated Sludge, Inc. against the Milwaukee Sewerage Commission.

While the suit against the Sanitary District has no direct bearing at present on the progress of the sewage treatment program, it is mentioned herein so that the Court may be advised of another element which tends to obstruct progress and may (if the patents are upheld) increase the cost of the works.

Packingtown Situation. Considerable progress has been made on the survey of the Stockyards and Packingtown mentioned in the last report to the Court. The sewer outlets of 28 packing companies have been tested, as well as all of the outlets of the Stockyards. It is hoped that this survey may be continued during the year 1936 to the extent necessary, so that a report can be made over a sufficient period of time to reflect normal conditions.

At the 1935 session of the General Assembly of the State of Illinois the Sanitary District Act was amended to grant police power to control the discharge of industrial wastes and to permit a charge being made for the handling of the same. This law went into effect July 1, 1935. It is anticipated that steps will be taken to make necessary surveys so that

The Sanitary District of Chicago may exercise the power granted under that statute.

Financial. The financial condition of The Sanitary District of Chicago has improved somewhat since the time of the last semi-annual report to the Court. The local tax situation has improved slightly. The amounts of taxes extended for the Sanitary District for the years 1928 to 1934, inclusive, and the amounts collected up to November 29, 1935, pursuant to these extensions, are as follows :

Year	Total Taxes Extended	Amount Collected	Amount Unpaid	Per- centage Unpaid
1928.....	\$ 19,448,392.46	\$ 17,350,771.08	\$ 2,097,621.38	10.79
1929.....	24,466,998.58	20,255,293.84	4,211,704.74	17.21
1930.....	22,453,699.40	17,091,947.72	5,361,751.68	23.88
1931.....	20,517,561.90	15,137,586.82	5,379,975.08	26.22
1932.....	19,281,643.24	12,877,152.60	6,404,490.64	33.22
1933.....	18,037,167.48	11,634,595.56	6,402,571.92	35.50
1934.....	21,163,009.22	8,322,487.85	12,840,521.37	60.67
	<u>\$145,368,472.28</u>	<u>\$102,669,835.47</u>	<u>\$42,698,636.81</u>	<u>29.37</u>

The amount, \$102,669,835.47, shown in the foregoing table, is the amount of Sanitary District taxes collected by the County Collector. Of this amount, \$99,114,019.21 has been turned over to the Sanitary District.

The taxes collected since the time of the last report to the Court amount to \$10,705,213.10, which is about 7.4 per cent of the taxes levied and due. This money was used to redeem tax anticipation warrants, to pay current expenses and to pay defaulted interest and principal of bonds. The non-payment of these taxes to the extents indicated above has forced the Sanitary District, through lack of revenue, to default

on a considerable amount of maturing principal on bonds used for construction work due from January 1, 1932 to December 1, 1935, inclusive, and a certain amount of interest on these bonds. The amounts in default, as of December 2, 1935, were:

Principal	\$20,718,890.00
Interest	2,412,311.25
Total.....	<u>\$23,131,201.25</u>

Refunding of Bonds. Because of the delayed tax collection schedule and the slow payments on tax bills rendered, payments of maturing interest and principal have not been made for the past few years by the Sanitary District, as heretofore stated. This fact and the circumstance that its bonds mature in the next few years in very large amounts made it advisable and, in fact, necessary to re-arrange the District's funded debt. Accordingly, the outstanding bonds are now being refunded through the cooperation of the bond holders, approximately 97 per cent of whom have indicated their acceptance of the plan.

This plan provides for the issuance of new bonds to the holders of bonds maturing January 1, 1936, and thereafter, amounting to \$119,227,000. These new bonds are due January 1, 1955, bear the same rate of interest as the old bonds but are subject to redemption on January 1st of the year after the year in which the old bonds for which they were exchanged were due to mature, or on any interest date thereafter. Bonds which were in default or will mature prior to January 1, 1936, amounting to \$20,718,890, will be paid in cash. This cash payment of principal is made possible through the recent sale above par

of bonds in that amount. The payment of the defaulted interest has also been arranged.

PWA Agreement. Reference was made in the last semi-annual report to the Court to an Application filed by The Sanitary District of Chicago, June 12, 1935 with the Federal Emergency Administration of Public Works to increase the allocation of funds to the Sanitary District from \$41,938,000 to \$58,630,000. This Application was approved and the allocation of funds was thereby increased \$16,692,000. A Supplementary Agreement, dated September 21, 1935, was executed between The Sanitary District of Chicago and the Federal Emergency Administration of Public Works. Construction to be financed by the additional funds include additional sewers in the Calumet, North Side, West Side and Southwest Side Projects, Control Works for the Chicago River and an extension of the North Side Sewage Treatment Works. All these projects are included in the construction program submitted to the Court by the Sanitary District in 1929 during the trial of the case.

Sale of Canals. As stated in the last report to the Court The Sanitary District of Chicago initiated steps to bring about the purchase by the Federal Government of the waterway improvements applicable to navigation in the South Branch of the Chicago River, the Little Calumet River, the Main Channel and the Calumet-Sag Channel. A public hearing on this matter was held before the United States District Engineer in Chicago December 19, 1934 and January 15, 1935. On August 15, 1935 the United States Division Engineer, Upper Mississippi Valley Division, issued a notice of unfavorable report with

respect to this matter. The Sanitary District thereupon appealed to the Board of Engineers for Rivers and Harbors and at a hearing before this Board, December 17, 1935, filed additional information and made additional arguments in favor of the proposed sale.

The total work accomplished by The Sanitary District of Chicago in the construction of sewage treatment works during the period from June 1, 1935 (the date of the summaries for the last report) to December 1, 1935 (the date of the summaries for this report) as measured by construction expenditures was, as follows:

TABLE 3.

Calumet Project	\$ 651,740.29
North Side Project.....	13,930.58
West Side Project.....	1,833,522.30
Southwest Side Project.....	1,351,268.30
West-Southwest Treatment Plant.....	1,301,557.84
Miscellaneous Plants and Sewers.....	28,995.08
Chicago River Controlling Works.....	492.04
Total.....	<u>\$5,181,536.43</u>

In addition to the amounts shown in Table 3, approximately \$1,820,000 had been earned by contractors up to December 1, 1935, on the various items of construction work, but had not been paid. Of this total amount, approximately \$930,000 was for unpaid vouchers on current work and \$890,000 was retained by the Sanitary District as reserved percentage until the final completion of the contracts.

By adding the various items indicated in Table 3 to corresponding items in Table 1, the completed portion of the sewage treatment construction program on December 1, 1935, was as follows:

TABLE 4.

COMPLETED WORK AS OF DECEMBER 1, 1935.

Calumet Project	\$ 26,479,408.59
North Side Project.....	37,140,868.18
West Side Project.....	51,158,410.62
Southwest Side Project.....	1,809,294.57
West-Southwest Treatment Plant.....	1,664,494.66
Miscellaneous Plants and Sewers.....	632,775.01
Chicago River Controlling Works.....	53,907.78
Total.....	<u>\$118,939,159.41</u>

After the execution of the latest agreement with the Public Works Administration, dated September 21, 1935, estimates on the entire future construction program were revised and reduced by \$7,736,000. The principal items entering into this reduction were \$1,500,000 of contingency items eliminated from estimates on Calumet and West-Southwest treatment plants; \$4,636,000 taken from the West-Southwest treatment plant estimate figuring ultimate capacity at 1,000 M. G. D. instead of 1,200 M. G. D. as previously done, also for omission of power recovery plant; \$701,000 saved on letting of Contracts 1 and 4 of the Southwest Side intercepting sewer; and \$499,000 cut from the estimate of cost of the proposed South Side Sewers. The estimated cost of future sewage treatment construction, as of December 1, 1935, is as follows:

TABLE 5.

FUTURE WORK AFTER DECEMBER 1, 1935.

Calumet Project	\$ 7,591,000
North Side Project.....	4,998,000
West Side Project.....	2,308,000
Southwest Side Project.....	36,957,000
West-Southwest Treatment Plant.....	26,614,000
Miscellaneous Plants and Sewers.....	1,950,000
Chicago River Controlling Works.....	3,000,000
Total.....	<u>\$83,418,000</u>

Funds remaining unexpended from the amounts obtained under the agreement of September 21, 1935 with the Federal Emergency Administration of Pub-

lic Works are definitely allocated to projects in this future work, estimated to cost \$39,044,000. This leaves work estimated at \$44,374,000 to be financed from other sources.

SEWAGE TREATMENT.

The population of The Sanitary District of Chicago, as of January 1, 1936, is about 4,404,000, according to estimates made from the figures of the 1930 census. The industrial wastes in the Sanitary District are assumed to be equivalent to the sewage of 1,767,000 additional persons. Hence, the total population and industrial wastes equivalent amount to 6,171,000. This figure includes the Corn Products wastes, equivalent to the sewage of 385,000 persons, which wastes have been greatly reduced, as a result of certain experimental work initiated by the Sanitary District.

The 1936 total population, and industrial waste equivalent, as above indicated, are estimated as 6,171,000. Up to date, the Sanitary District has assumed that so-called complete sewage treatment could produce an annual average of 85 per cent purification. Hence, so-called complete treatment for the total January 1, 1936, population and industrial wastes equivalent would equal the 100 per cent treatment of the sewage of 5,245,000, which is 85 per cent of 6,171,000.

The expenditures for sewage treatment have been indicated in Tables 1, 3 and 4. The amounts of actual sewage treatment in operation on June 25, 1935 (as of the time of the last report to the Supreme Court) and at the present time are shown in Tables 6 and 7, following:

TABLE 6.
ACTUAL SEWAGE TREATMENT IN OPERATION
AS OF JUNE 25, 1935.

Treatment Works	Population Equivalent	Percentage Treatment	Treatment 100 Per Cent Basis
Calumet:			
(Complete treatment)	15,000	85	13,000
(Sedimentation)	228,000	33½	76,000
North Side	1,167,000	85	992,000
West Side (Sedimentation)..	883,000	33½	294,000
Miscellaneous (Morton Grove, Glenview, Northbrook) ...	7,000	85	6,000
Corn Products (Reduction)..	382,000		316,000
Total	2,682,000		1,697,000

TABLE 7.
ACTUAL SEWAGE TREATMENT IN OPERATION
AS OF DECEMBER 24, 1935.

Treatment Works	Population Equivalent	Percentage Treatment	Treatment 100 Per Cent Basis
Calumet	279,000	85	237,000
North Side	1,184,000	85	1,006,000
West Side (Sedimentation)..	890,000	33½	297,000
Miscellaneous (Morton Grove, Glenview, Northbrook) ...	7,000	85	6,000
Corn Products (Reduction)..	385,000		331,000
Total	2,745,000		1,877,000

The extent of the operation of sewage treatment plants at the present time is equal to the 100 per cent treatment of the sewage of 1,877,000 out of 5,245,000 persons, which would be the present possible 100 per cent treatment if the sewage of the total population and industrial wastes equivalent of 6,171,000 were being treated. This indicates the actual treatment of approximately 35.8 per cent of the total sewage within the Sanitary District, although considerable additional construction work has been performed during this period, for which no credit will be taken in this percentage until the works are completed and put in operation.

DIVERSION OF WATER.

The net diversion of water from Lake Michigan during the calendar year 1934, averaged 6,433 cubic feet per second. The domestic pumpage of the Chicago metropolitan area during this period averaged 1,692 cubic feet per second; and the total flow from the Main Channel at Lockport averaged 8,125 cubic feet per second.

Diversion of water from Lake Michigan by The Sanitary District of Chicago since July 1, 1930, has been made in accordance with a Permit from the Secretary of War, dated June 26, 1930, which authorized the diversion of water as specified in the Decree of the Supreme Court, handed down April 21, 1930. This limits the net diversion to an annual average of not more than 6,500 cubic feet per second up to December 31, 1935. The average monthly diversion as made under this Permit from January 1 to December 20, 1935, is indicated in the table following:

Month 1935	Total Flow from Main Channel at Lockport C.F.S.	Inflow from Willow Springs Spillway C.F.S.	Domestic Pumpage Chicago Metropolitan Area C.F.S.	Net Diversion from Lake Michigan C.F.S.
January	8312	0	1631	6681
February	8325	0	1614	6711
March	8247	12	1567	6668
April	8376	1	1579	6796
May	8360	69	1561	6730
June	8214	0	1597	6617
July	8024	0	1743	6281
August	7732	0	1715	6017
September ..	7217	0	1621	5596
October	7824	0	1566	6258
November ...	8752	0	1505	7247
Dec. 1 to 20..	7737	0	1515	6222
Average	8093	7	1601	6485

The diversion of water from Lake Michigan will be reduced to an annual average of not more than 5,000 cubic feet per second on and after December 31, 1935.

All of which is respectfully submitted,

THE SANITARY DISTRICT OF CHICAGO,

By ROSS A. WOODHULL,
President.

WILLIAM H. TRINKAUS,
Acting Chief Engineer.

ERNST BUEHLER,
Attorney.

Attest:

JAMES J. SULLIVAN,
Clerk.