BEFORE THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1932.

State of Wisconsin, et al., *vs.* State of Illinois and Sanitary District of Chicago, et al.	No. 5, Original.
State of Michigan, et al., *vs.* State of Illinois and Sanitary District of Chicago, et al.	No. 8, Original.
State of New York, et al., *vs.* State of Illinois and Sanitary District of Chicago, et al.	No. 9, Original.

REPORT OF THE SPECIAL MASTER, EDWARD F. McCLENNEN

March 13, 1933.

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THE ERRORS CLAIMED.

After hearing all the evidence and arguments of the parties, I submitted a draft of this report substantially in its present form to the parties with a request for their suggestions for changes in substance and language. They made suggestions, some of which I have adopted. They also stated the parts of the report which they claimed were erroneous. Each of these claims is stated in the report at the point of alleged error. No other errors have been brought to my attention.

EDWARD F. MCCLENNEN,
Special Master.

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REPORT OF THE SPECIAL MASTER, EDWARD F. McCLENNEN.

March 13, 1933.

In obedience to the Order entered in the above entitled suits December 19, 1932, I have made summary inquiry, including hearings begun at the Federal Building in Chicago, January 12, 1933, and conducted there and at the United States Chamber of Commerce Building in Washington and ended at the Executive Mansion in Springfield February 28, 1933, at which were presented the evidence and arguments of all parties, and I now make this report.

The narrative of this situation and of its causes until the entry of the final decree on April 21, 1930 is stated in

order and elaborately in *Sanitary District of Chicago* v. *United States,* 266 U. S. 405, January 5, 1925; the report of the Special Master, now Mr. Chief Justice Hughes, filed November 23, 1927; the opinion of this Court, 278 U. S. 367, January 14, 1929; the report of the same Special Master on Re-reference, filed December 17, 1929; the opinion of this Court, 281 U. S. 179, April 14, 1930; and the final decree, 281 U. S. 696, April 21, 1930. It has become so extensive that repetition adding length and no weight should be avoided. This report is addressed to a Court familiar with what has gone before, and on that assumption.

The present inquiry has been made with the belief that both the law and the facts decided by the former two opinions and by the decree must be taken as unchangeable in this reference and that those found by the former Special Master should be so taken in orderly deference and with no responsibility therefor, on the present Special Master. The defendants claim that this is an error.

The present order when subdivided is to inquire as to six subjects, namely:—

THE QUESTIONS FOR INQUIRY AND REPORT.

1 A: The causes of the delay in obtaining approval of the construction of controlling works in the Chicago River.

1 B: The steps which should now be taken to secure such approval and construction.

2 A: The causes of the delay in providing for the construction of the Southwest Side Treatment Works.

2 B: The steps which should now be taken for such construction or, in case of a change in site, for the construction of an adequate substitute.

3 A: The financial measures on the part of the Sanitary District which are reasonable and necessary in order to carry out the decree of this Court.

3 B: The financial measures on the part of the State of Illinois which are reasonable and necessary in order to carry out the decree of this Court.

The six semi-annual reports filed for July 1, 1930 to January 1, 1933, inclusive, the Application filed by the Complainants October 3, 1932, and the Return filed by the Defendants November 7, 1932 as far as they purport to give primary facts, I find state them correctly except as set forth otherwise hereinafter; but although the various estimates and conclusions in the six semi-annual reports and in the Return filed November 7, 1932 were reached in good faith, yet, as it is unnecessary to determine their accuracy or reasonableness, no finding thereof is made at this point; and on the charges in the Application filed October 3, 1932, of bad faith, obstruction, avoidance, circumvention, delay, negligence, incompetence, dereliction and defiance and on the conclusions therein stated, no finding is made at this point.

1A: The Causes of the Delay in Obtaining Approval of the Construction of Controlling Works in the Chicago River.

The cause of this delay is a total and inexcusable failure of the defendants to make an application to the Secretary of War for such approval. The defendants claim that this finding is erroneous.

The complainants charge in substance in their application that this and other failures on the part of the defendants are due to an unfaithful effort to delay, avoid and circumvent the performance of the decree of this Court (Application, pp. 9, 12, 13, 14, 15, 16, 17, 18). The complete failure to do anything about Controlling Works and the small amount done about the Southwest Side Treatment Works warranted a belief on the part of the complainants, in the charge made. The defendants claim that this finding is erroneous. In the light of the evidence, and with regard

to the gravity of the charge when levelled at a sovereign State and one of its instrumentalities, I find that the truth of the charge has not been proved and, therefore, that it is not so.

It is true, however, that the decree is painful to the defendants and that they have been influenced by a hope that something would happen so that the flow at Lockport need not go as low as the 1500 c. f. s. to which the decree now limits them after December 31, 1938, and by the opinion of their engineers that if the intercepting sewers parallel to the main Chicago River and to the North Branch of it are completed before December 31, 1935, in accordance with the program submitted to the Special Master in 1929, it will be safe to do without controlling works if the diversion of 5000 c. f. s. continues. They virtually confess to this in their Return (pp. 26-31) and to an increase of this hope, based on the Rivers and Harbors Act of July 3, 1930 (46 Statutes at Large, Part 1, p. 918).

I find that the engineers of the Sanitary District hold this opinion that Controlling Works are not necessary under the conditions stated. I make no finding as to the correctness of this opinion as I regard this question as not before me under the terms of the order of December 19, 1932 but as set at rest for the present inquiry by the findings of the Special Master in 1929.

The Return (p. 26) attempts to excuse the failure to seek approval, by referring to the plans for controlling works submitted without any application by the Sanitary District to the United States District Engineer in November, 1926, not in anticipation of the decree of April 21, 1930, but in compliance with the conditions of the temporary diversion permit signed by the Secretary of War on March 3, 1925.

Constrained by the circumstances and by the direct evidence, I find that no expectation that the Secretary of War was going to approve these plans, entered into the reasons why the Sanitary District has not sought approval

of Controlling Works since April 21, 1930. The defendants regarded that old application as not officially but practically dead. One of the engineers for the Sanitary District so testified before me. The old application was dead. The defendants claim that these findings are erroneous.

Secretary of War John W. Weeks, on his own initiative made the requirement which became condition 6 of the permit of March 3, 1925, namely:—

"6. That the Sanitary District shall submit for the approval of the Chief of Engineers and the Secretary of War plans for controlling works to prevent the discharge of the Chicago River into Lake Michigan in times of heavy storms. These works shall be constructed in accordance with the approved plans and shall be completed and ready for operation by July 1, 1929."

The diversion permit which contained this was by its terms to cease on December 31, 1929.

In 1926 the Sanitary District submitted plans for single-pontoon-gate controlling works at the mouth of the Chicago River. These were revised from time to time in 1927.

March 31, 1927, Colonel Edward H. Schulz, the District Engineer at Chicago, made a progress report to the Chief of Engineers, then Major General Jadwin, which stated that a blue print sketch of this pontoon controlling gate was submitted and that detailed plans would be submitted as soon as the Sanitary District had come to an agreement with the Park Boards as to the exact location of a new bridge to be built, the abutments of which were to be used in connection with the construction of this controlling gate and that failing an agreement shortly it would devolve on the Sanitary District to provide its own location and abutments and present detailed plans. The Sanitary District submitted further details under dates in June and July, 1927.

Communications passed back and forth between the Chief of Engineers and the District Engineer at Chicago.

In December, 1928, the Chief of Engineers desired of the District Engineer a comprehensive study and report at the earliest practicable moment of all feasible methods of preventing reversal of flow in the Chicago River "for the purpose of determining what plan should be adopted to meet the permit condition,"—namely, condition 6 quoted above.

It is to be noted that what was under consideration was not an application by the Sanitary District, but a requirement by the Secretary of War, obviously designed to meet the conditions which would exist, when diversions ceased or were reduced, at the expiration of the temporary permit.

At this time, the decision of January 14, 1929, establishing the rights of the complainants, had not been handed down.

The District Engineer at Chicago at this time was Lieutenant Colonel W. C. Weeks of the Corps of Engineers who took up performance of duty there August 4, 1928. He knew that the Sanitary District had made studies of the subject. He sought the aid of these. As a result, the Sanitary District provided him with plans for twelve different methods of controlling works, some of them subdivisions of others. These were not submitted as parts of any application or in anticipation of another application to be made. They were the voluntary assistance given by one engineering force to another.

At this time, the Sanitary District was still under the impulse of the requirement of the Secretary of War. The District did not and does not want controlling works, until it is established that in its opinion they are necessary.

Under date of March 11, 1929, Lieutenant Colonel Weeks, as District Engineer, reported to the Chief of Engineers, Major General Jadwin, on all the various kinds of controlling works in the Chicago River which he deemed feasible for preventing reversal of flow in the Chicago River. These were some seventeen, including the above twelve. In this report, Method C was "By means of controlling

works across the main channel of the Chicago Sanitary District near Kedzie Avenue, Chicago, Illinois. Provision is made for navigation at all times." This was near the head of the Sanitary Canal. The report closes thus,—"*RECOMMENDATIONS* It is recommended: (a) That Method C in combination with a pontoon gate at the mouth of the Chicago River (Outer Drive Bridge) be adopted for the control of reversals in the Chicago River. (b) That the pontoon gate at the mouth of the Chicago River (Outer Drive Bridge) be not constructed until the need therefor has been demonstrated."

It does not appear to me that this report as such or the twelve plans as such with which the Sanitary District had assisted the District Engineer were before the Special Master in 1929.

A month later, April 19, 1929, General Jadwin made his statement to the Special Master on Re-reference quoted at page 114 of his report. "The second type of control works", there termed by General Jadwin "an unwarranted obstruction to navigation" was the type, and the only one, set out in the plans of the Sanitary District filed in 1926 and 1927 and was "the pontoon gate at the mouth of the Chicago River (Outer Drive Bridge), which the District Engineer had recommended "be not constructed until the need therefor has been demonstrated."

The prospect that this only plan which the Sanitary District had submitted as its attempt at compliance with condition 6 above, would be "recommended by the Chief of Engineers" was so dim, as the defendants knew, that they were more than warranted in the belief which they had that the old and only plan submitted by the Sanitary District to the Secretary of War or to the Chief of Engineers was practically dead.

Not only this,—but General Jadwin, at the same time (pp. 108, 109) said:—"The need for further control works is not yet established. Control works are not necessary in the interests of navigation . . . Their purpose is to

prevent the discharge of polluted water from the river into the lake where it would menace the city water supply and beaches. . . . It is not now considered possible to fix the exact limit of diversion at which the present control at Lockport [some 34 miles away] will become unsatisfactory . . . the present Lockport control may be found satisfactory with a total diversion as low as 5000 c. f. s. annual average and might possibly be satisfactory with a lower diversion. It is the present attitude of the Chief of Engineers, therefore, that the United States should not require the construction of controlling works, but that the Department will consider any application for the approval of plans of controlling works, to be constructed by the Sanitary District or other agency, and may be expected to approve these plans, if the works are shown to be necessary, to be effective, and to be the minimum detriment to navigation. The question of control works is therefore a sanitary matter for solution by the Chicago Sanitary District or the City of Chicago."

The effect on navigation, of controlling works at the head of the Sanitary Canal near Kedzie Avenue would be that only, of one lock to pass through, on a non-Federal waterway.

General Jadwin's statement left the matter on April 19, 1929 so that the Sanitary District did not want to build controlling works, the War Department requirement in the current permit was gone, in effect, and the Chief of Engineers was of opinion that the protection of the Chicago water supply and beaches did not call for controlling works at least for the time being or until the diversion fell below 5000 c. f. s.

The Sanitary District knew all this at the time. Therefore they knew that the War Department intended to do nothing more as to the several methods of control which had been considered, until the Sanitary District made another application.

This left only the attitude of the Court to be considered. Therefore, in 1929, the defendants presented to the Special Master a plan which included controlling works. Major General Jadwin retired in the latter part of 1929, as Chief of Engineers. On December 17, 1929, the Special Master filed his Re-reference Report which said (p. 81):—"In their proposed findings, the *defendants* have provided that the *Sanitary District* shall *immediately* (not italics in original) submit plans to the Chief of Engineers or his representative for such works to be constructed at or near the *mouth of the Chicago River,* or at or near the *northern or eastern terminus of the Main Drainage Canal,* and that they shall be completed and in operation within a period of two years subsequent to the date of the Secretary of War's authorization under the statute."

This request for a finding was addressed to a Special Master who, as the defendants knew, had been informed fully of the plan submitted in 1926 to 1928 (Re-reference Report, p. 105) and who had heard General Jadwin condemn that method. The request meant a *new* submission immediately, to a succeeding Chief of Engineers.

With the death of the old plan and of any present requirement by the War Department, the remaining possibilities then seemed to be (1) controlling works near the mouth of the River, consisting of a lock and sluices, or a combination of lock and gate, instead of a single gate, or (2) controlling works about seven and one-half miles up the River, near the northern or eastern head of the Sanitary Canal (R. R. 112) as the District Engineer had recommended (as quoted above).

It was for one or both of these for which the Sanitary District was to submit plans, *immediately.*

In the judgment of the Special Master, the safe reduction to 5000 c. f. s. was dependent on the completion of these controlling works (R. R. 107, 117, 118). For this, there was required the time for completing plans, their submission to the Chief of Engineers, consideration by him

and those under him, required modifications, changes in conformity, reconsideration, approval, and then two or three years for construction (R. R. 81).

The defendants argue now that the judgment of the Special Master in 1929, as to the need of controlling works was one of precaution and not of a final conviction that the hydraulics of the river absolutely required controlling works, and that in the present reference the Special Master has had the benefit of the opinions above described of the engineers of the Sanitary District. This is important, if it is my duty to reexamine the question, set at rest by the Special Master in 1929. If I ought to reexamine that question, I could not do it without hearing further evidence, as the parties were discouraged by me from going into the question as thoroughly as should be, if so serious a matter is to be reexamined. The behavior of the river in times of storm up to 1929, when the average diversion was 8500 c. f. s. or more, was before the Special Master in 1929. Since then there has been an opportunity to observe its behavior with an average diversion of 6500 c. f. s. There has been no opportunity to observe its behavior with an average diversion of 1500 c. f. s. or of 5000 c. f. s. The opinions of the engineers of the Sanitary District given me are no more emphatic than that which Major General Jadwin gave to the Special Master in 1929.

The location of controlling works was a matter of great importance, involving occasion for much difference of opinion. Works near the mouth of the River would be more effective but more expensive and a considerable obstruction to navigation between Lake Michigan and the head of the waters of the port of Chicago. Works at the head of the Sanitary Canal would be less effective but no obstruction to this navigation (R. R. 105-117).

On December 17, 1929, the Special Master filed his Rereference Report which states it to be his judgment that to reduce the diversion to 5000 c. f. s. without the completion of the sewage treatment works and without controlling

works will bring a serious, and not demonstrably unjustified, apprehension as to the pollution of the water supply of the City of Chicago (not a party) by reversals in times of storm (p. 117). This meant the works in the program submitted in 1929, which included the North Side, Calumet, West Side, and Southwest Side Treatment Works.

The Special Master reported his conclusion and recommendation for decree to be (pp. 142, 147):—"(6) That subject to the approval of the Secretary of War upon the recommendation of the Chief of Engineers, pursuant to the applicable statute, controlling works should be constructed by the Sanitary District for the purpose of preventing reversals of the Chicago River at times of storm and the introduction of storm flow into Lake Michigan; that for this purpose the Sanitary District should immediately submit plans for such works to the Chief of Engineers of the War Department; and that such controlling works should be constructed by the Sanitary District within two years after receiving the authorization of the Secretary of War."

A reader of this report stating the respective positions of the Chief of Engineers and of the Special Master can see a difference of judgment between them on the question of menace to health and will assume that if the Court confirms the Special Master's judgment on this question, the War Department will defer to that judgment, when called upon to determine whether the remedy puts an undue burden on navigation. The Sanitary District should have assumed this. The Sanitary District claims that there is no basis for this finding.

Concurrently with these suits, there was going on a consideration of the improvement of the Illinois River by the United States.

Under date of December 20, 1929, the District Engineer at Chicago, Lieutenant Colonel Weeks, submitted to the Chief of Engineers, through the Division Engineer, George R. Spalding, Lieutenant Colonel, Corps of Engineers, with the latter's indorsement of its recommendations, an exten-

sive report on the Re-examination of the Illinois and Des Plaines Rivers. This report became subsequently a part of Senate Document 126 hereinafter described. This report was favorable to a Federal waterway from the existing Federal waterway ending at Starved Rock near Utica on the Illinois River to the existing Federal Project at Chicago, by way in part of the Sanitary Canal.

Lieutenant Colonel Weeks personally was reluctant to have navigation over this new project, if it became one, impeded by controlling works at the mouth of the Chicago River or even at the head of the Sanitary Canal. He regarded controlling works unnecessary if a diversion of 5000 c. f. s. plus domestic pumpage was to continue.

On December 31, 1929, the Secretary of War, on the recommendation of Major General Lytle Brown who had then succeeded Major General Jadwin as Chief of Engineers, issued to the Sanitary District a permit to divert until July 1, 1930, 8500 c. f. s. as measured at Lockport, and thereafter 6500 c. f. s. in addition to domestic pumpage. This permit recited the decision of this Court handed down January 14, 1929 (278 U. S. 367) and the filing of the Master's Report (Dec. 17, 1929) and some of its recommendations. The permit was to expire "on the effective date of the decree on the Master's report to be entered by the Supreme Court of the United States."

Consistently with General Jadwin's position announced on April 19, 1929, to the Special Master, as to the requirements of navigation and as to the requirements of the War Department in consequence, this permit contained no condition that the Sanitary District must provide controlling works.

The District Engineer's report of December 20, 1929 as to the Illinois River did not become public before April, 1930.

On March 12, 1930, the State of Illinois and the Sanitary District filed a Brief on the Exceptions to the Special

Master's Report on Re-reference. As to controlling works, this (pp. 131, 132) says:—

"Controlling Works, Use and Purpose.

(e) THE MASTER HAS FOUND THAT SUCH CONTROLLING WORKS WILL NOT MATERIALLY INTERFERE WITH NAVIGATION, AND HAS PROVIDED BY HIS FORM OF DECREE THAT THE DEFENDANT SANITARY DISTRICT SHALL IMMEDIATELY SUBMIT PLANS TO THE WAR DEPARTMENT FOR SUCH CONTROL WORKS AND THAT THE CONTROL WORKS SHALL BE CONSTRUCTED AND INSTALLED BY THE SANITARY DISTRICT WITHIN TWO YEARS AFTER THE DATE OF THE APPROVAL OF SUCH PLANS BY THE WAR DEPARTMENT. CONSEQUENTLY, AN EXCEPTION ON ANY PROGNOSIS THAT THEY MAY NOT BE BUILT IS WITHOUT MERIT.

Complainants take great exception, and it seems to us improperly, to the Master's report on the ground that the controlling works may not be built unless the Secretary of War, on the recommendation of the Chief of Engineers, approves the plans for such works. As the Master's Report and form of decree does not provide for the reduction of the diversion below 6,500 c. f. s., in addition to pumpage, even after all the sewage disposal works are constructed, until such controlling works are installed, complainants therefore say that the reduction below 6,500 c. f. s. may never take place. This is a hypercritical exception, in view of the Master's finding that

> 'the additional controlling works at the head of the Canal would not seem to involve any burden that could not readily be borne in such navigation.' (Master's Report, p. 117.)

The attitude of the Engineer Corps is shown by Gen. Jadwin's statement (Master's Report, p. 109):

> 'the Department will consider any application for the approval of plans of controlling works, to be constructed by the Sanitary District or other agency, and may be expected to approve these plans if the works are shown to be necessary, to be effective, and to be the minimum detriment to navigation.'

The Master has found that the controlling works will not materially interfere with navigation. The Chief of Engineers has stated that it may be expected that plans therefor will be approved by the Engineer Corps if the works are built so as to cause the minimum detriment to navigation. The decree recommended by the Master requires the Sanitary District to immediately submit plans and construct the works within two years after the plans are approved. Therefore, it can hardly be said that the plans for such works will not be approved and that they will not be installed within the 2 year period required. In view of these circumstances, complainants' exceptions to the Master's Report on this proposition should not be given any consideration."

On May 15, 1930, the Sanitary District passed a resolution, quoted hereinafter in section 3 A, to induce the Legislature to exempt it from the requirement of a referendum on bonds issued for loans for the construction of the North Side, Calumet, West Side, and Southwest Side Treatment Works. This contained no reference to the Controlling Works.

The District Engineer at Chicago and George M. Wisner, consulting engineer (now dead) in the employ of the Sanitary District, and Horace P. Ramey, Assistant Chief Engineer of the Sanitary District, were among those who read promptly the opinion of this Court handed down April 14, 1930 (281 U. S. 179) and the decree entered April 21, 1930 (281 U. S. 696).

They all had noticed that the Special Master had recommended a decree ordering the Sanitary District to submit forthwith to the Chief of Engineers, plans for controlling works, and to construct them within two years after receiving authorization from the Secretary of War. They all noticed that the decree of the Court did not contain such an order.

These engineers of the Sanitary District, sometimes one and sometimes the other, met Colonel Weeks, the District Engineer, from time to time in relation to other features of the work of the Sanitary District which required these meetings. Soon after the decree was entered they discussed the significance of the absence from the decree, of reference to controlling works. None of the three wished for controlling works or regarded them as necessary, if a flow of 5000 c. f. s. plus domestic pumpage was to continue. Colonel Weeks desired to avoid any unnecessary impediment to navigation. The Rivers and Harbors Act of July 3, 1930 was imminent. The discussions were continued after it passed. The Sanitary District wished to save the expense of controlling works. In this fertile ground of desire, there sprang up a doubt as to whether the Sanitary District was under obligation to go forward with controlling works. In the discussions with Colonel Weeks, he and Mr. Wisner invariably mentioned the lack of action of the Department as to Colonel Weeks' report on controlling works and by tacit agreement they did not press the matter. Colonel Weeks gave Mr. Wisner no encouragement to bring up the subject but on the contrary said that they should let the matter rest until they had some intimation that the War Department wanted something done. Notwithstanding this tacit agreement, Mr. Wisner continued to say, for a year or so, substantially, "when you do hear, let us know, because we are ready and anxious to go ahead." It is matter of conjecture which there is no need to draw, why he said this. The Sanitary District was neither ready nor anxious to go ahead with

controlling works. The Sanitary District claims that this finding is not justified. The tacit agreement was reached in April, May or June, 1930. It has never been changed.

On June 26, 1930, the Secretary of War granted the Sanitary District a permit which recited the fact of the Court's decree of April 21, 1930 and authorized diversion "as specified in the said decree." It did not mention controlling works.

At no time in the discussions with the engineers of the Sanitary District did Lieutenant Colonel Weeks attempt to commit the War Department or intimate what might be the attitude of his superiors. In no way, was the Sanitary District given to understand that approval of controlling works would not be recommended by Major General Brown, the Chief of Engineers, or that they would not be authorized by the Secretary of War.

These discussions are referred to, for such extenuation, if any, as they furnish for the failure to seek approval of controlling works in accordance with the proposal submitted to the Special Master and assured in the brief for the defendants, as above quoted; and not as furnishing any justification. The Sanitary District claims that this paragraph is an error.

Neither Lieutenant Colonel Weeks nor the Sanitary District intended to violate the decree of this Court. They took the noninclusion of any reference to controlling works in the decree to indicate that possibly the Court did not insist on them. The Sanitary District, in view of the opinion of the Court (281 U. S. 179) and of the defendants' proposal to the Special Master and in their brief was not justified in lying back silently and unadvised, on any such doubt. The District now claims that it resolved the doubt against the construction that the decree required controlling works. No such action by the Sanitary District has been shown.

The Sanitary District did not seek or receive the advice of counsel as to their obligation either to apply for authority for controlling works, or to construct them.

The tacit agreement was to refrain from doing, what the defendants had informed the Special Master at the hearings and the court, by their brief, would be done immediately.

The recommendation of Colonel Weeks for a controlling lock and gates at the head of the drainage canal near Kedzie Avenue with sufficient plans to show the outline of its structure and its effect on navigation had been in the hands of the Chief of Engineers since March, 1929. The Sanitary District had plans for such works on its own files. An application could be filed within a few days. The attitude of Major General Brown could be ascertained quickly. His inclinations appear later.

The Sanitary District, after the entry of the decree of April 21, 1930, charted the work to be done on the entire program which had been submitted to the Special Master, into periods. This chart was completed in September, 1930. The main chart did not appoint any period for the controlling works. A separate chart set the total expenditure of $4,000,000 for them in 1935. The District knew that it was virtually impossible to build them without the use of two summer seasons. This chart if followed meant that they would not be completed at the earliest before autumn of 1936, nearly a year behind the requirements of the Special Master's conclusions.

The defendants claim in their Return (p. 30) and now persist in the claim that the Act of July 3, 1930 has made a change which may call for a review of the decree as to controlling works. This claim is not borne out by the Act. The only pertinent parts are these:—

"The following works of improvement are hereby adopted and authorized, to be prosecuted under the direction of the Secretary of War and supervision of the Chief

of Engineers, in accordance with the plans recommended in the reports hereinafter designated."

(Here follow several pages of names of places, within which is the following:—)

"Illinois River, Illinois, in accordance with the report of the Chief of Engineers, submitted in Senate Document Numbered 126, Seventy-first Congress, second session, and subject to the conditions set forth in his report in said document, but the said project shall be so constructed as to require the smallest flow of water with which said project can be practically accomplished, in the development of a commercially useful waterway: *Provided,* That there is hereby authorized to be appropriated for this project a sum not to exceed $7,500,000: *Provided further,* That the water authorized at Lockport, Illinois, by the decree of the Supreme Court of the United States, rendered April 21, 1930, and reported in volume 281, United States Reports, in Cases Numbered 7, 11, and 12, Original, October term, 1929, of Wisconsin and others against Illinois, and others, and Michigan against Illinois and others, and New York against Illinois and others, according to the opinion of the court in the cases reported as Wisconsin against Illinois, in volume 281, United States, page 179, is hereby authorized to be used for the navigation of said waterway: *Provided further,* That as soon as practicable after the Illinois waterway shall have been completed in accordance with this Act, the Secretary of War shall cause a study of the amount of water that will be required as an annual average flow to meet the needs of a commercially useful waterway as defined in said Senate document, and shall, on or before January 31, 1938, report to the Congress the results of such study with his recommendations as to the minimum amount of such flow that will be required annually to meet the needs of such waterway and that will not substantially injure the existing navigation on the Great Lakes to the end that Congress may take such action as it may deem advisable."

"*Preliminary Examinations and Surveys*

SEC. 2. The Secretary of War is hereby authorized and directed to cause preliminary examinations and surveys to be made at the following-named localities, the cost thereof to be paid from appropriations heretofore or hereafter made for such purposes: *Provided,* That no preliminary examination, survey, project, or estimate for new works other than those designated in this or some prior Act or joint resolution shall be made: *Provided further,* That after the regular or formal reports made as required by law on any examination, survey, project, or work under way or proposed are submitted no supplemental or additional report or estimate shall be made unless authorized by law: *And provided further,* That the Government shall not be deemed to have entered upon any project for the improvement of any waterway or harbor mentioned in this Act until the project for the proposed work shall have been adopted by law."

(Here follow several pages of names of places, and then —)

"Calumet River, Little Calumet River, Lake Calumet, and the Sag Channel, Illinois, with a view to providing a connection with, and terminal transfer harbors for, the waterway from Chicago to the Mississippi River."

"Chicago Harbor, Illinois."

"Calumet Harbor and River, Illinois and Indiana."

(Here follow several pages of names of places.)

This language used after the entry of the decree in these cases, is significant:—"the said project shall be so constructed as to require the smallest flow of water with which said project can be practically accomplished, in the development of a commercially useful waterway" . . . "the water authorized at Lockport" [by the decree in this case, namely, 6500 c. f. s. until December 31, 1935, 5000 c. f. s. until December 31, 1938, and 1500 c. f. s. thereafter,

plus pumpage estimated at 1700 c. f. s.] is hereby authorized to be used for the navigation of said waterway" . . . "the Government shall not be deemed to have entered upon any project for the improvement of any waterway or harbor mentioned in this Act until the project for the proposed work shall have been adopted by law."

Senate Document Numbered 126 above mentioned, is in eighty-seven pages composed of a letter dated April 3, 1930 to the Chairman of the Senate Committee on Commerce from Major General Lytle Brown, Chief of Engineers, and an accompanying report of the Board of Engineers for Rivers and Harbors, and supporting documents including Lieutenant Colonel Weeks' report of December 20, 1929 above mentioned. This letter of the Chief of Engineers responds to a resolution requesting a review of reports submitted to the second session of the Fifty-sixth Congress (expiring March 4, 1901) "with a view to the extension of free navigation with a 9-foot channel from Utica to Lake Michigan."

The letter refers to the existing project for the improvement of the Illinois River from Utica to its mouth on the Mississippi and continues "There are also Federal projects in the Chicago and Calumet Rivers which provide depths suitable for large lake vessels for some distance above the mouths of these streams. These Federal projects are connected by a system of waterways constructed by non-Federal interests. The Sanitary District of Chicago has constructed an artificial canal, usually referred to as the Chicago Sanitary Canal, which extends from the West Fork of the Chicago River to the Des Plaines River near Lockport, and has also done considerable work in enlarging the channel of the South Branch and West Fork of the Chicago River between the head of the Federal project on that river and the head of the Sanitary Canal." In short, the letter states that there is then no Federal project in this waterway between the Port of Chicago and Utica on the Illinois River. It describes the proposal of

the State of Illinois to turn over to the United States this project from Utica to Lockport on conditions therein set forth and "if the United States undertakes to complete, maintain, and operate the waterway." It says that the district engineer [Lieutenant Colonel Weeks] reports "that to obtain such a link connecting the extensive Federal waterway systems of the Great Lakes and the Mississippi Valley the United States would be justified in expending $7,500,000. . . . he believes that a depth of 9 feet should be provided and the small amount of additional dredging necessary to provide such a depth, even if the flow at Lockport is reduced to 1000 cubic feet per second, has been included in the estimate. If the flow should be reduced below this amount, the necessary dredging would be somewhat increased, but the increase in cost would be relatively small." The letter then says that the district engineer recommends that the authorized project be extended from Starved Rock near Utica to the existing Federal Projects at Chicago, and that the division engineer and Board of Engineers for Rivers and Harbors concur that it is advisable for the United States to undertake to complete this waterway and "After due consideration of these various reports, I am of the opinion that there should be a Federal Waterway as the connecting link between the Mississippi River System of Waterways and the Great Lakes system via the Illinois River, the Des Plaines River, the Chicago River, and certain waterways improved or under improvement by the State of Illinois and the Sanitary District of Chicago or other political subdivisions of the State and that such waterway should have a depth of 9 feet. . . . That the project thus adopted shall be in all its parts a navigable waterway of the United States . . . the 9-foot channel heretofore adopted by Congress can be secured by various flows of water even as low as 1000 cubic feet per second. Decreasing the flow increases the dredging but not in any serious amount."

The accompanying report dated April 1, 1930 of the Board of Engineers says. . . . "The district engineer considers that the waterway should have a depth of 9 feet to correspond with that of the existing Federal project in the Illinois, Mississippi, and Ohio Rivers. The amount of additional dredging required to produce such a depth will depend somewhat on the amount of water diverted through the Sanitary Canal. He recommends that sufficient additional dredging be done to provide a channel 9 feet deep when the flow at Lockport is 4000 cubic second-feet. If the flow should be reduced below this amount the necessary dredging would be somewhat increased, but the increase in cost would be relatively small."

The decree, allowing 1500 c. f. s. plus pumpage estimated at 1700 c. f. s., in substance allowed 3200 c. f. s. at Lockport.

On April 4, 1930, Brigadier General Herbert Deakyne, Chief of The Board of Army Engineers for Rivers and Harbors, testified before the Committee on Rivers and Harbors of the House of Representatives that:—You need a certain amount of flow for the operation of the locks. Every time a ship goes through that takes a lock full of water to let that ship go through, so you need some water, but you can adapt your improvement as far as depths are concerned to the amount of flow that comes, provided it is enough to furnish all the necessary water for locking. At the point where the Sanitary District connects with the Des Plaines River, that stream has not enough water to supply locks and dams below that point without any diversion from Lake Michigan. I think we would need some water out of the lake if we are going to have commerce clear up to the capacity of the waterway. I would say that we would find a thousand cubic feet per second necessary. That would be sufficient to make the connection between the Mississippi River and the Lake, navigable from the commercial viewpoint. (This is in addition to upwards of 740 cubic feet per second furnished by the Des Plaines River and the Kankakee River, which join below Lockport to

form the Illinois River.) As a matter of fact, the present project with this expenditure of $7,500,000 and a thousand feet of water will take care of the improvement.

On May 16, 1930, Major General Brown, in answer to questions testified before the Senate Committee on Commerce. An abbreviated paraphrase of what he said is as follows:—

Mr. Chairman and members of the committee, I understand that the proposition on which we are trying to arrive at a decision is that of limiting by this bill the diversion from Lake Michigan for the purpose of this Lakes-to-the-Gulf waterway to 1500 cubic feet per second. My view of the matter, briefly, is this: That there are many uncertainties in regard to this project still outstanding, and we, who are willing to be responsible for the work, desire as much latitude in the amount of water available as is possible for Congress to give us. The policy of the War Department is very clearly outlined as to the diversion of water from the lake, and that is as little water shall be diverted from the Great Lakes as is practicable to get along with. There are two phases to the question: The amount of water that it would take to accommodate by flotation of commerce, as we expect; and it has been stated by the authorities heretofore that in this waterway they thought they could get along with as little as 1,000 cubic feet per second. There is another condition that is going to be there that we have to confront, in order to make a practicable waterway, and that is the pollution of water in that densely populated area around Chicago. It is a practical question that has to be met. It is my present judgment, as to the smallest flow of water that is necessary to develop a commercially useful waterway at this point, the indications are, with everything in view,—is that something like 5000 feet per second should be held available for that purpose. When I said in my letter of May 1 to Senator Vandenberg "It is my impression that satisfactory navigation can be secured in

the proposed Illinois waterway with a flow of 1,000 cubic feet per second," I meant on the sole consideration of lockages, seepage, and leakage, without reference to anything else that people have had in view right along in the study of this measure. That is the statement that is made by previous chiefs of engineers, that 1,000 feet, the total channelization of the Illinois River, would be the amount that would be sufficient for lockage. Navigation, as we see it, is likely to be influenced by pollution. I agree with the statement about a thousand feet and stand by it. I am familiar with and have no quarrel with the report of my own board, printed in Document 126, which says a 9-foot channel can be secured by various flows of water, even as low as a thousand cubic feet. There are a number of other eminent engineers who have said the same thing. It is pretty well settled that a thousand feet ought to produce this net result, if you understand what they mean when they say that, with a flotation only in view. My only objection to a fixed limitation is that we want some latitude. The testimony that General Jadwin gave the Supreme Court was based on Chicago Harbor only, and that was 1,500 cubic feet per second. We have got an entirely different proposition now than Chicago Harbor only; we have got the waterway all the way from the Lakes to the Mississippi River. The project authorized by Congress about three years ago for the lower Illinois from Utica to Grafton was a 9-foot channel and the flow was 5,000 cubic feet per second and the dredging being done there was done with that end in view. The development of a 9-foot channel in my judgment at the present time only requires a 1,000-foot diversion, under the conditions stated. A thousand cubic feet per second provides a 9-foot channel in the project that is now being executed on the lower Illinois from Utica to Grafton, with only one provision we would resort to complete channelization of the Illinois River. That would require some more expense, not very much

more excavation. It would require locks and dams in large number, lots of things.

It was with the above-quoted engineering information virtually incorporated by reference in the Act, that Congress provided, either because of or nothwithstanding it, that "the said project shall be so constructed as to require the smallest flow of water with which said project can be practically accomplished, in the development of a commercially useful waterway" but as much as the decree of April 21, 1930 allows. In other words, it amounts to saying, "dredge to such a depth that there will be a depth of 9 feet when only 1500 c. f. s. plus 1700 c. f. s. pumpage—3200 c. f. s.—comes down at Lockport."

The Act by adopting the report of the Chief of Engineers provided for no larger flow than the decree allows. There is no present Federal project requiring more diversion than the decree allows. There is no indication that Congress will hereafter allow a greater diversion. The provision of the Act for the smallest flow leaves no discretion to the Secretary of War to permit a larger diversion for this project. Congress has exercised its full authority directly, without leaving a part in the hands of the Secretary. The Sanitary District claims that this statement is erroneous.

With this definite indication by Congress and with its knowledge that this Court has decided that any greater diversion invades the rights of the States of Wisconsin, Minnesota, Ohio, Pennsylvania, Michigan, and New York, and also causes them serious damage, it should not be anticipated that Congress, even if it has the power, is going to change its attitude and to continue to inflict that damage in order to save some dredging for which, in the judgment of the Chief of Engineers, the "cost would be relatively small."

This makes it unnecessary to consider whether Congress has the power to take the navigable capacity of the Great

Lakes and to add it to the tributaries of the Mississippi River, that is, whether so doing is but regulating interstate commerce. The report of the Special Master filed in October Term 1927 deals exhaustively with the subject (pp. 152-165) and the Court found it unnecessary to decide the question (278 U. S. 367) because "it will be time enough to consider the scope of that authority when it is exercised" (281 U. S. 179).

Since July 3, 1930, the War Department has done some dredging within the Sanitary Canal just above the dam at Lockport. Also, it has issued some bridge permits for bridges over the Canal.

A Federal waterway between Lake Michigan and the Illinois River, may follow both or either the Chicago River and the Main Drainage Canal to Lockport or the Calumet River and the Calumet Sag Channel to its confluence with the Main Drainage Canal. This point is about twenty-four miles southwest of the mouth of the Chicago River and about sixteen miles southwest of the head of the main canal near Kedzie Avenue. A lock near this head of the main canal would not interfere with navigation by the Calumet way. Neither would the many bridges in the city of Chicago.

The Act of July 3, 1930 furnishes no justification for the failure of the defendants to move for authorizatoin of controlling works. The Sanitary District claims that this finding is erroneous.

A new reason to the contrary has now arisen, in the relations with the Dominion of Canada. The Sanitary District claims that this finding is erroneous.

It should not be anticipated that Congress will lower the level of Lake Michigan by diversion at Chicago, hereafter, in view of the possible unfriendliness of so doing to the Dominion of Canada (First Report, pp. 83-85, 95, 96, 118). The treaty recently negotiated and now awaiting the advice and consent of the Senate provides that

"Article IV

"The High Contracting Parties agree:

"(b) that during the construction and upon the completion of the works provided for in Article III the flow of water out of Lake Ontario into the St. Lawrence River shall be controlled and the flow of water through the International Section shall be regulated so that the navigable depth of water for shipping in the Harbor of Montreal and throughout the navigable channel of the St. Lawrence River below Montreal, as such depths now exist or may hereafter be increased by dredging or other harbor or channel improvements shall not be lessened or otherwise injuriously affected."

"Article VIII

"The High Contracting Parties, recognizing their common interest in the preservation of the levels of the Great Lakes System, agree:—

"(a) 1. that the diversion of water from the Great Lakes System, through the Chicago Drainage Canal, shall be reduced by December 31st, 1938, to the quantity permitted as of that date by the decree of the Supreme Court of the United States of April 21st, 1930.

(2. This subsection provides for an emergency diversion if approved by an arbitral tribunal.)

"(b) that no diversion of water other than the diversion referred to in paragraph (a) of this Article, from the Great Lakes System or from the International Section to another watershed shall hereafter be made except by authorization of the International Joint Commission."

After such a negotiation, and after this Court has decided that the diversion is damaging to the Great Lakes System, even if the treaty obligation does not ripen, it is not to be anticipated that Congress will authorize the damage.

No improbability of authorization of controlling works justified the defendants in failing to seek it. There was no indication that the Chief of Engineers was averse to recommending such works, already found necessary in the Rereference Report of the Special Master.

On December 28, 1932, I requested the Secretary of War to authorize a report. In compliance, on January 4, 1933, Major General Lytle Brown, Chief of Engineers, wrote as follows:—

"The Secretary of War has referred to me your letter of December 28, 1932, in which you request an authoritative report from this Department on just what has been done (in chronological order) to secure the approval of the construction of controlling works in the Chicago River by way of formal applications, correspondence, interviews, and any other follow-ups, and the present attitude of this Department toward such controlling works as have been planned in the Chicago River, as contemplated when the decree of April 21, 1930 was entered in the Supreme Court. You further request an authoritative report on whether anything is in contemplation from the standpoint of the requirements of navigation which would affect in any way the prospect of an increased diversion of water from Lake Michigan.

"No recent application for the approval of controlling works in the Chicago River has been presented to this office. It is my understanding that such applications were presented prior to my appointment as Chief of Engineers. I have directed that a search of the records be made and the report which you request be prepared. Its preparation will probably require some days.

"The Department is prepared to approve plans for any controlling works presented by the Sanitary District, provided these works do not constitute an unreasonable obstruction to navigation.

"The river and harbor act approved July 3, 1930 directs that as soon as practicable after the Illinois Waterway

shall have been completed in accordance with that act, the Secretary of War shall cause a study of the amount of water that will be required as an average annual flow to meet the needs of a commercially useful waterway, as defined in Senate Document No. 126, 71st Congress, 2d session, and shall, on or before January 31, 1938, report to Congress the results of such studies with his recommendations as to the minimum amount of such flow that will be required annually to meet the needs of such waterway and that will not substantially injure the existing navigation of the Great Lakes, to the end that Congress may take such action as it may deem advisable.

"Since the Illinois Waterway is not as yet fully completed or in operation, the study directed is yet to be made. I may however advise you that it is the present attitude of the Department that the eventual reduction in the diversion from Lake Michigan provided in the decree of the Supreme Court will entail the construction of certain locks and dams on the Illinois River. The Department is not however now prepared to furnish you with an authoritative report on this subject.

"I am advised that the duties of the Secretary of War may require his absence from Washington on January 7th, the date which you suggest for a conference.

"This Department is however prepared to afford you all information within its records bearing on any phases of the matter toward which you may desire to direct your inquiry."

On January 9, 1933, Brigadier General G. B. Pillsbury, Acting Chief of Engineers, sent a detailed report which is the basis of several of the findings hereinbefore stated.

This information was available at all times to the defendants. Largely it was known to the defendants, before the entry of the decree on April 21, 1930 (Re-reference Report, pp. 107-116). It was furnished in twelve days after it was requested.

The letter of the Chief of Engineers shows clearly how dead was any old application of the Sanitary District and also his readiness "to approve plans for any controlling works presented by the Sanitary District, provided these works do not constitute an unreasonable obstruction to navigation." The navigation question appears to be the only one on which he deems that he should exercise his judgment, in view of the action of the Judicial branch of the Government on the question of need of controlling works to prevent a menace to health.

The prospect now is that the Chief of Engineers in determining whether or not to recommend controlling works, when the defendants apply for authorization, in conformity to the program before the Special Master in 1929, will act on the assumption that the flow at Lockport is to be limited permanently to 1500 c. f. s. plus domestic pumpage, estimated by the end of 1938 at 1900 c. f. s. The Sanitary District claims that this finding is erroneous. On July 21, 1932, the Chief of Engineers submitted to the Secretary of War, this memorandum:—

"WAR DEPARTMENT,
Office of the Chief of Engineers,
Washington, July 21, 1932.

Memorandum for the Secretary of War.

The following memorandum is submitted on the effect the provision of the St. Lawrence waterway treaty will have upon the Illinois Waterway.

The decree of the Supreme Court entered April 21, 1930, in the matter of the diversion of water from Lake Michigan by the State of Illinois and the Sanitary District of Chicago specified:

That on and after July 1, 1930, the State of Illinois and the Sanitary District of Chicago are enjoined from diverting any of the waters of the Great Lakes-St. Lawrence system of watershed through the Chicago drainage canal and its auxiliary channels or otherwise in excess of an annual

average of 6,500 cubic feet per second, in addition to domestic pumpage;

That on and after December 31, 1935, unless good cause is shown to the contrary, the State of Illinois and the Sanitary District of Chicago are enjoined from diverting as above in excess of an annual average of 5,000 cubic feet per second, in addition to domestic pumpage, and on and after December 31, 1938, are enjoined from diverting as above in excess of an annual average of 1,500 cubic feet per second, in addition to domestic pumpage.

It is estimated that by 1938 the domestic pumpage will be approximately 1,900 cubic feet per second, in addition to the amount of 1,500 feet provided by the decree, giving a total permissible flow through the drainage canal and waterway of 3,400 cubic feet per second. The flow in the Illinois River will be greater.

Article VIII of the Great Lakes-St. Lawrence Waterway treaty limits the diversion of water from the Great Lakes system through the Chicago Drainage Canal to that decreed by the Supreme Court but provides that in the event of an emergency the United States proposes to increase the diversion of water from the Great Lakes system, through the Chicago Drainage Canal in excess of 1,500 cubic feet per second as decreed by the Supreme Court, and the Government of Canada takes exception thereto, the matter shall be submitted for final decision to an arbitral, having power to increase the diversion and to stipulate such compensating provisions as may be just and equitable.

There is no conflict between the decree of the Supreme Court and Article VIII of the treaty. The decree specifies a minimum withdrawal after December 31, 1938, of 1,500 cubic feet per second in addition to domestic pumpage, unless good cause can be shown to the contrary, whereas, the treaty provision while limiting the diversion to the same amount provides that in an emergency an increase may be permitted.

It has been contended that the flow at Lockport as limited by the treaty will destroy the usefulness of the Illinois waterway. This contention is without basis of fact as will be seen by a study of the table set forth below:

Waterway	*Total canalized length*	*Total fall*	*Average low-water flow*	*Average yearly tonnage*
	Miles		C. f. s.	
Monongahela River	131	153.6	200	25,000,000
Ohio River	981	429.14	1,100	20,000,000
Panama Canal	51	85	1,300	28,000,000
Illinois River.....	291	165	[1] 3,400	[2] 10,000,000

[1]At Lockport.

[2]Estimated commerce upon completion of waterway.

The flow at Lockport permissible under the treaty will not only be more than three times the average low-water flow of the Ohio River at Pittsburgh, and two and one-half times the yearly average amount required for lockages in the Panama Canal, but will be seventeen times the low-water flow of the Monongahela River, which carries an average yearly tonnage two and one-half times that estimated for the Illinois waterway. These facts establish without question that the permissible flow will be more than ample for any commerce that may develop on the Illinois waterway.

If additional locks and dams in that portion of the Illinois River below Utica are found to be necessary to provide a 9-foot channel during low-water stages, the cost thereof will be negligible compared to expenditures made on other waterways and to the advantages resulting to the public from the proposed improvement of the St. Lawrence River.

So far as the Mississippi River is concerned, it is possible that a large diversion in the order of 10,000 cubic feet per second might have a sensibly beneficial effect during extreme low stages. However, such a diversion is unacceptable to the Lake States since it materially lowers the

level of the lakes thereby injuriously affecting navigation. The difference between the permissible withdrawal of 3,400 cubic feet per second and 5,000 or 6,000 cubic feet per second which has been advocated is entirely immaterial, in its effect upon the Mississippi River.

The above facts and opinions do not take into consideration the sanitary situation at Chicago and south of there. It is assumed that it will be safeguarded without requiring more water from Lake Michigan than is specified in the decree of the Supreme Court, and that this will be done in the time allowed for the purpose in that decree.

LYTLE BROWN,
Major General,
Chief of Engineers."

The defendants by their Return filed November 7, 1932 (p. 27) say in substance that nothing should now be done by them about controlling works and they persist in this contention. They intend and propose to do nothing about controlling works.

At the hearings in January and February, 1933, before me, the attitude of the Sanitary District was that they do not propose to do anything about controlling works unless the War Department deems it necessary, unless obliged to, in order to make compliance with the decree of this Court.

In the semi-annual reports filed with the Clerk of this Court, by the Sanitary District, nothing is said about the abandonment of the plan for immediate application for authorization of controlling works. They do not show anything done about them, except by inference. The report for July 1, 1930 showed among "Future Work December 31, 1928 . . . Chicago River Controlling Works $4,000,000"—"Completed Work as of April 21, 1930 . . . Chicago River Controlling Works $53,413.82"—"Future Work after April 21, 1930 . . . Chicago River Controlling Works $3,946,586.18". The same figures are carried through to the report for January 1, 1933, except that

one dollar and ninety-two cents has been added to the completed work and subtracted from the future work.

It did not occur to the compiler of the reports, that he should include a statement of the abandonment of controlling works. Its non-inclusion was not with an intention to deceive.

The financial strains on the Sanitary District were no part of the reason for not applying for approval of controlling works. Sufficient money in hand would not have caused such an application.

It is on consideration of this entire record that I find the almost three years of non-attempt by the defendants to obtain approval of the construction of controlling works to be an inexcusable delay.

1 B: The Steps Which Should Now be Taken to Secure Such Approval and Construction.

The most effective step is an enlargement of the decree of April 21, 1930 by the addition of a paragraph enjoining the State of Illinois to provide forthwith the necessary money for, and through the Sanitary District of Chicago or through other instrumentality chosen by the State to submit plans forthwith to the Chief of Engineers of the War Department, for controlling works for the purpose of preventing reversals of the Chicago River at time of storm and the introduction of storm flow into Lake Michigan and to make application forthwith to the Secretary of War for authorization of such works and diligently to pursue such application with all necessary modifications to secure within four months if possible the recommendation of the Chief of Engineers and the authorization of such Works by the Secretary of War, and immediately thereafter to begin and to continue to construct such works to completion within two years.

No proceeding is pending for any change in the cessation dates, decreed. Therefore, in determining what steps

should now be taken it is to be assumed that the diversion will recede to 5000 c. f. s. on December 31, 1935 and to 1500 c. f. s. on December 31, 1938, in addition to domestic pumpage now estimated at 1700 c. f. s.

The postponement of the cessation, it has been decided, was in order to avoid so far as might be, the possible pestilence and ruin with which the defendants have done much to confront themselves (This case, 281 U. S. 179).

The continued deposit of untreated sewage in the Chicago River, a part of the navigable waters of the United States, without adequate water to flush it away through the Sanitary Canal, it has been decided would be likely to render the Port of Chicago practically unusable (Report of Special Master on First Reference, pp. 169, 170; and 278 U. S. 367, 417). This if done, would be an obstruction to navigable capacity in violation of Section 10 of the Act of March 3, 1899, c. 425, 30 Stat. 1151, U. S. Code, Title 33, sec. 403, unless recommended by the Chief of Engineers and authorized by the Secretary of War.

To reduce the diversion to 5000 c. f. s. on December 31, 1935 without completion of the Southwest Side Treatment Works and without Controlling Works will bring a serious and not demonstrably unjustified, apprehension as to the pollution of the water supply of the City of Chicago (not a party) by reversals in times of storm (Re-reference Report, p. 117).

The defendants urge that nothing be done. If no order is entered, nothing will be done and there will be no controlling works for years to come, if ever.

The complainants urge that the Court should appoint a special officer of this Court to perform the decree on behalf of the State of Illinois and of the Sanitary District and at their expense, with extensive powers to contract, and to issue bonds of both and to levy and to collect taxes. The steps so urged are so inexpedient if not futile that they should not be taken, even if this Court has the power.

This makes it unnecessary to decide whether the Court has this power. If I am in error, and the Court deems that it should take the steps urged, a memorandum on the subject of power is included hereinafter for the convenience of the Court.

There is no reason to think that if the State of Illinois is ordered to do this work, any more will be necessary, or that a commissioner would be any more effective than an order of this Court.

The construction of the Controlling Works should be begun this year, if authorization can be obtained. For reasons given hereinafter, neither the State nor the Sanitary District now has available money for this purpose this year. A commissioner exercising all the powers of the General Assembly of Illinois and all the powers of the Sanitary District under the existing constitution and legislation cannot raise money this year for this particular purpose, until this Court has by its decree imposed a duty upon the State of Illinois to do this work. If the commissioner is to exercise direct powers of this Court superior to those of the Sanitary District and of the General Assembly to levy and to collect taxes and to issue bonds the necessary machinery cannot be set up in time. The commissioner would be received in Illinois as a carpet-bagger. He would need an army of subordinates to make the valuations, the assessments, and the collection of taxes from a reluctant people. His bonds would not find a ready market in Illinois and would be viewed with hesitation as a novelty elsewhere. He should not be vested with Governmental discretion by the Court for such a huge Governmental project. It would be a serious task for the Court to draft a code of laws to govern his operations. He would have to build up an engineering staff and to exercise a judgment as to what particular kinds of structures should be built and what methods should be used for their construction. These and many more considerations of impracticability condemn the method.

On the other hand, this Court can accomplish the result by its decree against the State of Illinois.

The Report on Recommittal contained recommendations and a proposed form of decree which orders the Sanitary District to complete the several Treatment Works and, if authorized, the Controlling Works within stated times preceding the dates at which the successive reductions in diversion are to take place. The Court deemed that the decree should not contain these commands but that it should be confined mainly to an injunction against the diversion. It is to be assumed that this was because the complainants' rights were protected by stopping the diversions and their interests were not affected by what was done about sewage treatment or about controlling works. By the decree thus limited, if it is carried out, the complainants' rights except for postponing the time and for allowing diversion of 1500 c. f. s. permanently, are protected fully.

A new situation has arisen. It has become apparent that the proposed plan of the Sanitary District will not be carried out before 1936 at the earliest as to the controlling works or on time as to the intercepting sewers and treatment works unless there is a decree which makes progress possible. If the Sanitary District were the only one to suffer the consequences, the warning of the Court that "they must find out a way at their peril" (281 U. S. 179) would seem to leave the complainants secure of their injunction. Then probably they would not find it necessary to make their present application. As it is, doubtless they are apprehensive that the menace to health which will result from diminishing the diversion, without Controlling Works and without sufficient Treatment Works will persuade the Court to give the defendants more time. If the Court does not grant it, the Court in affording the complainants no more remedy than they are entitled to, will be exposing others to a menace to health which the Court can avoid by forcing the construction of the Controlling Works, if authorized, and the construction of the Treatment Works.

The persons whose health in the judgment of the Court will be menaced are not the State of Illinois and not the Sanitary District of Chicago. They are the inhabitants of the District, many of them citizens of the United States and travelers, some of them in interstate commerce. They are many of them entirely innocent. They are not parties to the suit. They can be protected by an effective decree that the works be built.

The defendants in their Brief filed March 12, 1930 on Exceptions to the Re-reference Report (p. 139) say:—

"The Court is appropriately and amply equipped to determine what sewage disposal works should be installed to dispose of the sewage and waste of the Sanitary District from a practicable standpoint and the time within which they may be constructed and to enforce by injunction the installation of such works."

The State of Illinois should now be enjoined to install such works.

It will be convenient to deal, in part, with the construction of the controlling works and with the construction of the Southwest Side Treatment Works together.

A decree ordering the Sanitary District to proceed now as rapidly as should be to complete construction of controlling works would be impossible to perform because of the financial condition of the District, which is considered hereinafter. The order should be to the State of Illinois.

The General Assembly of Illinois is now in regular session. Past experience indicates that this session will last into June, 1933, and then end.

The Constitution of Illinois, adopted in 1870, provides:—

"Article IV

"Legislative Department.

"Sec. 1. The legislative power shall be vested in a general assembly, which shall consist of a senate and house of representatives, both to be elected by the people."

The Supreme Court of Illinois (*The People* v. *Barnett*, 344 Illinois 62, 66, 76) has defined this section emphatically:—"Thus all the legislative power inherent in the people of the State of Illinois has been vested in the General Assembly, except in those cases in which the power has by express limitation or necessary implication been withheld. Since it alone has the power, the General Assembly has also the duty, and upon it alone rests the full responsibility, of legislation. This power it may not delegate to any other officers or persons or groups of persons, or even to the whole body of the people, or to a majority of the voters of the state voting at a general election or at a special election. The constitution has made no general provision for a referendum of any act of the General Assembly to a vote of the people of the whole State to determine whether or not that act shall become a law."

"We hold that, under the constitution of Illinois, the General Assembly is the sole depository of the legislative power of the State; that it has no power to delegate its general legislative power, and may not refer a general act of legislation to a vote of the people of the State to decide whether it shall have effect as a law except where the constitution requires such reference."

The constitution of Illinois does not require a vote of the people to validate an act of the General Assembly to raise at once in the only possible way and to expend the money directed by a valid decree of the Supreme Court of the United States and necessary for the performance of that decree. Indeed, the decision quoted indicates that because the General Assembly cannot delegate its legislative power and duty to have the State perform its obligation under the Constitution of the United States, such a vote of the people would be unconstitutional under the constitution of Illinois.

When the State of Illinois became a part of the United States and a party to its constitution, the people of the State retained no right to vote that the State should not

use its necessary means to perform its duties to other States as the Supreme Court of the United States within its jurisdiction has adjudged those duties to be and as it has enjoined the State to perform them.

It has come to pass that the only way in which the State of Illinois can perform those duties is by becoming indebted. Construction contracts and bond issues are the necessary means.

The State of Illinois is under a liability which it is within the jurisdiction of the Supreme Court of the United States to compel it to satisfy out of the resources of the State. The State has among its resources, the inherent power to contract for construction and to borrow money. When the Constitution of the United States by the judgment of its Supreme Court obliges the State to use that resource, any self-imposed prohibition to perform that obligation is repugnant to the supreme constitution and falls. A vote of howsoever large a number of people would be unconstitutional.

The Constitution of Illinois contains some commands as to what the General Assembly shall or shall not do in the exercise of the legislative power of the State, but it contains no provision reserving any part of that legislative power, to the people or cutting down this complete grant. The people cannot legislate.

Two things among others which the General Assembly may not do for internal purposes, are described in later sections of the Constitution, namely:—

"Section 18. Each General Assembly shall provide for all the appropriations necessary for the ordinary and contingent expenses of the government, until the expiration of the first fiscal quarter after the adjournment of the next regular session, the aggregate amount of which shall not be increased without a vote of two-thirds of the members elected to each House, nor exceed the amount of revenue authorized by law to be raised in such time; and all appropriations, general or special, requiring money to be paid

out of the State treasury, from funds belonging to the State shall end with such fiscal quarter: *Provided,* the State may, to meet casual deficits or failures in revenues, contract debts, never to exceed in the aggregate $250,000; and moneys thus borrowed shall be applied to the purpose for which they were obtained, or to pay the debt thus created and to no other purpose; and no other debt, except for the purpose of repelling invasion, suppressing insurrection, or defending the State in war (for payment of which the faith of the State shall be pledged), shall be contracted, unless the law authorizing the same shall, at a general election, have been submitted to the people, and have received a majority of the votes cast for members of the General Assembly at such election. The General Assembly shall provide for the publication of said law, for three months, at least, before the vote of the people shall be taken upon the same; and provision shall be made at the time for the payment of the interest annually, as it shall accrue, by a tax levied for the purpose, or from other sources of revenue; which law, providing for the payment of such interest by such tax, shall be irrepealable until such debt be paid: *And, provided further,* that the law levying the tax shall be submitted to the people with the law authorizing the debt to be contracted."

"Section 20. The State shall never pay, assume, or become responsible for the debts or liabilities of, or in any manner give, loan or extend its credit to, or in aid of any public or other corporation, association or individual."

If it is the duty of the State of Illinois to build works necessitated by its adjudged violation of the rights of the States of Wisconsin, Minnesota, Ohio, Pennsylvania, Michigan and New York, in order, under tolerable conditions, to restore the enjoyment of those rights to the complainant States, the incurring of liabilities therefor, will not be an assumption of responsibility for the liabilities of the Sanitary District of Chicago, even if the State chooses to re-

coup itself thereafter from the Sanitary District. The liabilities will be direct, of the State itself.

If, instead of this injunction, this Court had deemed the effect on third parties so intolerable, that the injunction must be denied and the Court, in the common way, had retained the bill for the assessment of damages sustained by the complainants and had entered a decree for payment of the amount, by the wrongdoers, that decree would be a debt of the State of Illinois, as well as of the Sanitary District. The duty to pay damages for future wrongful diversions would continue, as a duty of the State. These works are to render the injunction tolerable and so to prevent a liability for continued diversions. Therefore Section 20 does not stand in the way, if this Court enters a decree that the State complete the works.

The record ending in the final decree of April 21, 1930, shows that the wrong was done and is being done by the State. This has become *res adjudicata.* The postponement of the remedy did not make the continued diversion less of a wrong.

"In 1861, the Legislature [of Illinois] provided for improvement in the [Navigation] canal by excavation and a larger flow of water from Lake Michigan." (278 U. S. 367, 402).

"In 1881, the Illinois Legislature passed a resolution . . . to draw water from Lake Michigan through the Chicago River and the canal" (p. 402).

"The Sanitary District was organized under the Illinois Act of 1889" (Laws 1889, p. 125) (p. 403).

Section 23 of this act expressly provided that "If any channel is constructed under the provisions hereof by means of which any of the waters of Lake Michigan shall be caused to pass into the Des Plaines or Illinois rivers such channel shall be constructed of sufficient size and capacity to produce and maintain at all times a continuous flow of not less than 300,000 cubic feet of water per

minute" [5000 c. f. s.] . . . "If the population of the district drained into such channel shall at any time exceed 1,500,000, such channel shall be made and kept of such size and in such condition that it will produce and maintain at all times a continuous flow of not less than 20,000 cubic feet of water per minute for each 100,000 of the population of such district" [For a population of 3,500,000 (Re-reference Report, p. 5) 11,666 c. f. s.] (Original Report of Special Master, p. 15).

The Act of the Legislature of Illinois of June 10, 1895 (Ill. Laws 1895, p. 168) provided that the sanitary district constructing the channel shall at the time any sewage is introduced therein, turn into said channel not less than 20,000 cubic feet of water per minute [333 c. f. s.] for every 100,000 inhabitants of said district [for 3,500,000 people 11,666 c. f. s.] and "shall thereafter maintain the flow of such quantity of water" (Orig. Report, p. 17).

The State of Illinois commanded the Sanitary District of Chicago to do this wrong to the complainant States.

"The exact issue is whether the State of Illinois and the Sanitary District of Chicago by diverting 8,500 cubic feet from the waters of Lake Michigan have so injured the riparian and other rights of the complainant States bordering the Great Lakes and connecting streams by lowering their levels as to justify an injunction to stop this diversion" (278 U. S. 367, 409).

"The Legislature of Illinois and the Sanitary District have for a long period been strongly insistent upon such a use of the waters of Lake Michigan as would dispose of the sewage of the District and incidentally furnish a navigable water route from Lake Michigan to the Mississippi basin." (278 U. S. 367, 419).

"These suits, brought to prevent the State of Illinois and the Sanitary District of Chicago from continuing to withdraw water from Lake Michigan as they now are doing" (281 U. S. 179, 196).

"It was decided that the defendant State and its creature the Sanitary District were reducing the level of the Great Lakes, were inflicting great losses upon the complainants and were violating their rights, by diverting from Lake Michigan 8,500 or more cubic feet per second" (281 U. S. 179, 196).

"The defendants have submitted their plans for the disposal of the sewage" (281 U. S. 179, 197).

"It already has been decided that the defendants are doing a wrong to the complainants and that they must stop it. They must find out a way at their peril. We have only to consider what is possible if the State of Illinois devotes all its powers to dealing with an exigency to the magnitude of which it seems not yet to have fully awaked. It can base no defences upon difficulties that it has itself created. If its constitution stands in the way of prompt action it must amend it or yield to an authority that is paramount to the State." (281 U. S. 179, 197).

"The defendants, the State of Illinois and the Sanitary District of Chicago, . . . are enjoined" (281 U. S. 696).

As an original fact and as *res judicata,* the State of Illinois did the wrong. The State of Illinois "must find out the way" to remedy the wrong. The State and the Sanitary District have presented only one way, the construction of controlling works if authorized and the construction of treatment works. They say in their brief that this court has power to enjoin the installation of such works.

The State of Illinois should be so enjoined.

Such an injunction will be a help and not a hindrance to the State. It will remove all doubt as to the liability of the State. When the matter comes before the General Assembly, it will not be the political question of building works for the Sanitary District. It will be the one-sided question—shall the State of Illinois perform its adjudged duties or shall it be in contempt of a decree of the Supreme

Court of the United States, and subject to the pecuniary or other penalties thereof as well as to the odium of disrespect.

Unless the State of Illinois is given the assistance of this conclusive determination of its duties, it cannot be known what time will be required for legislation.

There is an announced inability on the part of the spokesmen for the State of Illinois, to accept the language of the opinions and of the decree in these suits. They are quoted three pages back. Notwithstanding all there said, it is argued that the independent municipal corporation, the Sanitary District was and is the one which diverts this water and that the necessary measures now presented are devised as an unwise expedient to make the innocent State provide money for the Sanitary District. The opinions and the decree both show that this is not so. The State did this thing. The Court has decided so. It is the present duty of the State to hasten to right the adjudged wrong. It must be that if this is set out in the decree itself, the terms can be made unmistakable. I have heard and read no less than four arguments for the State on this point.

Even, it was argued graciously but insistently that the State was in a way but a jurisdictional party and that the Sanitary District was the substantial party.

With earnestness and with obvious sincerity the Governor of Illinois, February 28, 1933, testified that:—"It is of course, difficult for me to comprehend how it is possible for any court to impose upon our State responsibility for the obligations of a local tax spending municipality like the self-controlling Sanitary District.—Surely, no incident in the long history of our State has given any justification for the thought of any fair mind that our State, as a sovereign member of the Union, has failed to carry out any valid obligation to any sister state and to the nation. We do not consider the obligation of the Sanitary District of Chicago the obligation of the State of Illinois."

This statement ignores the obligation and the duty of the State already adjudged, to stop diverting water contrary to the rights of the Complainant States and to make the cessation tolerable to health.

The Governor had been in office fifty days only. He had been burdened with grave responsibilities. He had felt it necessary to call out militia to prevent possible riots. He estimated the daily cost of this to be between three thousand and four thousand dollars. He had had no opportunity to read the extensive record in these cases. Doubtless he was not aware that it was the State which commanded the Sanitary District to divert 11,666 c. f. s. of water which did not belong to it and that in obedience to that command the District is continuing to divert this water to the extent of 6,500 c. f. s.

There is another respect in which the State will be assisted by the determination of its duties, by decree. The latest estimate of the Sanitary District, February 1, 1933, calls for $139,000,000 to complete the work still to be done. It is unnecessary to determine how accurate this is. The complainants admit that it is enough and contend that it is too much. For the tolerable performance of the decree of April 21, 1930, the actual cost must be expended before December 31, 1938 or within five years and eight months of the earliest date at which a decree on this report may be expected. This is at the rate of approximately $25,000,000 a year. Contracts for this must be made. This amount must be available in money, if contracts are to be made.

The State may be expected to prefer to raise this by issues of bonds rather than wholly by taxation. The money required for the current year cannot be collected in taxes soon enough.

Under section 18 above quoted of the Constitution, "no other debt, except for the purpose of repelling invasion, suppressing insurrection, or defending the State in war (for payment of which the faith of the State shall be

pledged) shall be contracted, unless the law authorizing the same shall at a general election, have been submitted to the people, and have received a majority of the votes cast for members of the General Assembly at such election."

It is assumed that this prevents any contracts and any bonds for internal purposes without such a popular vote. The next general election is to be held in November, 1934.

If a decree of the Supreme Court of the United States imposes a duty upon the State, for the performance of which it is necessary to contract and to borrow money, the General Assembly, possessed of the legislative power of the State, may exercise that power to contract and to borrow the necessary money. It seems untenable that the people, by vote or by not voting, could prevent the State from performing a decree of the Supreme Court of the United States. This Court has already said in this case, "It can base no defences upon difficulties that it has itself created. If its Constitution stands in the way of prompt action it must amend it or yield to an authority that is paramount to the State" (281 U. S. 179, 197). This seems to be tantamount to saying that for this Federal purpose the State without a popular vote may contract and may borrow money, if ordered by this Court to do so. A State may not avoid the performance of its duties imposed by this Court, by providing for such avoidance in its constitution.

The defendants contend that a popular vote is necessary and also that bonds of the State cannot be marketed advantageously unless supported by the opinion of counsel that they are legal and that no counsel would take the responsibility of saying that the legality of an issue without popular vote was free from doubt. This last probably is so.

The contention of the defendants brings the question before the Court for decision *inter partes.*

The decision of this Court will set all doubts at rest and will enable counsel to certify to the legality in this respect of the bond issues and so will improve their marketability.

Counsel have been requested to furnish any opinions, of the Courts of Illinois particularly, which are apposite. They have been unable to find any.

I have assumed that the defendants are right in contending that the Constitutional provisions under discussion are not only directory but also mandatory, when operative. They are not operative when forwarded to defeat or to impede the effectiveness of a decree of the Supreme Court of the United States entered at the suit of other States for a noncontractual wrong done them by the State of Illinois. The State of Illinois has legislative power to right that wrong. Its whole legislative power is vested in the General Assembly. Its obligation under the Constitution of the United States is to exercise that power to perform the decree of this Court entered against the State, within the jurisdiction of the Court under the paramount Constitution.

I find that the steps which should now be taken to secure such approval and construction of controlling works in the Chicago River are the enlargement of the decree of April 21, 1930, by the addition set forth at the beginning of this section 1 B, above.

2 A: The Causes of the Delay in Providing for the Construction of the Southwest Side Treatment Works.

The causes of this delay are (1) an inexcusable and planned postponement of the beginning of construction of these Works to January 1, 1935 which left an inadequate time for their completion before December 31, 1938, at the rate of progress expected or to be expected under the methods pursued by the Sanitary District, and (2) the failure to proceed to a definite decision as to a site and to the acquisition of the site so chosen, and (3) the failure to proceed with reasonable diligence to prepare designs, plans, and specifications for the Works at this site or on the site of the West Side Works. The Sanitary District claims that this whole finding is erroneous.

It has been found that two years and six months would be a reasonable time to allow for the necessary preliminary steps for preparing plans and specifications and for advertising and passing upon bids (Re-reference Report, p. 58) and five and a half years for physical construction including tuning up, making a total of eight years (p. 70), and that the Southwest Side Treatment Works, with appurtenances should be completed on or before December 31, 1938 (p. 142).

This was the work which was to require the longest time. The diversion was to go to its permanent low of 1500 c. f. s. on December 31, 1938. This postponement was to give time for this longest job.

The eight years which were allowed were on the assumption of continuous progress beginning in 1930. The defendants contended for more time.

The Sanitary District passed an ordinance to acquire a specific site for this plant, on December 26, 1929, nine days after the Re-reference Report was filed. It proceeded with diligence to get the necessary information to make purchases or to condemn. Complaints arose from the neighborhood. The Sanitary District appointed a proper citizens' committee to report on the site. They reported in favor, within three months after the decree was entered in these cases. Public hearings were held promptly. Protestants presented respectable evidence that the ordained site was unnecessary and that the West Side site was large enough for both works.

On August 15, 1930, the Sanitary District prepared a plan for a layout of the entire West Side Works and Southwest Side Works on the present 501-acre site of the West Side Works and on about 200 acres contiguous thereto on the west, not owned by the Sanitary District. This layout included sludge drying beds. It provided definitely for the expected sewage until 1945 and tentatively for that up to 1970.

Nothing was done toward acquiring the 200 acres.

Opposition to the ordained site continued. On January 22, 1931 the Sanitary District repealed the ordinance of December 26, 1929.

One of the reasons, why the Sanitary District repealed this ordinance, was that the District was about to submit a bond issue to popular vote, and it was thought advisable not to have the prospect of success dimmed by this particular site protest.

In view of the protest and if the West Side site is adequate, this repeal was a proper exercise of judgment. In view of the obligation of the Sanitary District to proceed with all proper speed to provide Southwest Side Treatment Works, the ordinance should not have been repealed, until the Sanitary District had decided that the West Side site was adequate for both or that a better site was obtainable promptly. The Sanitary District claims that this finding is erroneous. The Sanitary District, then, had not decided that the West Side site was adequate for both or that a better site was obtainable promptly.

The impediments in the way of acquisition of a site and the repeal of the ordinance were outlined in the reports of the Sanitary District to this Court for July 1, 1930, January, 1, 1931, and July 1, 1931.

In May, 1932, the Sanitary District, for the first time, prepared a plan for a layout of a combined West Side Works and Southwest Side Works, on the present site of the West Side Works, with an incineration plant substituted for any sludge drying beds, not already built.

Turn, now, from the selection of a site to measures for construction.

On September 10, 1930, the engineers of the Sanitary District completed a chart, assigning periods for the construction of each major part of each of the Treatment Works and of the intercepting sewers to serve each, namely, except for controlling works, the projects set out in the Re-reference Report (pp. 10, 11) as estimated for the future, by the defendants to cost as of December 31, 1928,

$172,166,000. In the chart, the classifications differed somewhat from those in the estimates to the Special Master in 1929. Those estimates carried a catch-all item for the unforeseen of $10,000,000. This was really a safety range, and not an estimate. In the September 10 chart this item as such disappears. The amount is spread ratably over the detailed items, making them each, generally, about 106% of actual estimates. It does not appear how much had been included already for contingencies, in the items of the original estimate.

In the September 10 chart the divisional totals were:—

Calumet		$21,106,000
North Side		2,500,000
West Side		58,592,000
Southwest Side	$49,940,000	
Racine Ave. Station	4,968,000	
South Side Sewers	19,429,000	74,337,000
Des Plaines		4,025,000
Other Intercepting Sewers		9,483,000
		$170,043,000

The chart assigns to each item an engineering cost and a construction cost. The total of these items for engineering is $8,117,000. The chart does not assign a time for the expenditure of this engineering cost. It is included in the $170,043,000. The separate total for construction cost is the balance of $161,926,000. It is this total, which the chart assigns by items to periods.

The chart carries an additional item "Controlling Works, $4,000,000", not assigned to any period.

The chart is entitled "Dates for Awarding Contracts for the Complete Sewage Treatment Program." It is blocked into quarter years. It carries a note "The time for construction is shown only to the nearest three month period."

As to the Southwest Side Treatment project of $49,940,000, the chart assigns December 1, 1930 to March 31,

1932 for land at a cost of $3,000,000, and no construction work before January 1, 1935. The construction work begins with Imhoff Tanks. The other items are progressively deferred by quarter years. They gradually overlap to nearly full concurrence in the latter part of 1937. The whole is completed December 31, 1938.

The Racine Avenue Pumping Station ($4,968,000) is placed for construction ($4,758,000) between January 1, 1932 and June 30, 1934.

The South Side Sewers ($19,429,000) are placed for construction ($18,247,000) between October 1, 1933 and December 31, 1938.

Each construction, is preceded by a chart symbol for three months for "Advertising and Awarding Period."

If it be assumed that the uncharted preliminary steps for preparing plans and specifications, requiring two years and six months (Re-reference Report, p. 58) were taken promptly and to a conclusion on all the items before advertising for any bids, the whole Southwest Side Project would be ready for bids by January 1, 1933 and not much before. If construction on the project generally, requiring five and a half years (p. 70), were then advertised, contracted for, and begun, it would be done June 30, 1938.

The Sanitary District had contended that more time would be necessary.

In actual operation, there would not be this marked division between total design and total constructions. The Re-reference Report contemplates some concurrence of design and construction.

Whichever way is pursued, the charted apportionment of the Southwest Side Project is well in arrears of the program required by the indications of the Re-reference Report.

Reference to the work if any done on the North Side, West Side, Calumet, and Des Plaines Projects and on the other intercepting sewers is omitted at this point, as it ap-

pears to be not within the Order of December 19, 1932, appointing me.

In attempted justification of the complete postponement of charted construction of the Southwest Side Treatment Works, the Sanitary District asserted its desire to have the cost of the whole Treatment Project fall somewhat reasonably evenly over the years from 1931 to 1938 inclusive.

The chart does not support the assertion. The charted division of the construction cost is:—

1930	$419,000
1931	16,208,000
1932	17,786,000
1933	17,697,000
1934	14,143,000
1935	17,178,000
1936	22,960,000
1937	23,813,000
1938	31,722,000
	$161,926,000

When attention was called at the hearings, to the disparity of charted costs in the respective years, it was stated that the Sanitary District had other large obligations expected to mature in the early years. It may be assumed that this is true. No finding on it is called for or made.

As the Re-reference Report contemplates that largely the construction of the Controlling Works and of the North Side, West Side, Calumet, and Des Plaines Projects shall be completed by December 31, 1935 at a cost of approximately 42% of the cost of all the Projects, the Sanitary District was right in giving timely precedence to those other Projects, in case it was impossible to deal concurrently with all the Projects.

The Re-reference Report indicates that the Southwest Side Project should go forward promptly during the progress on the other Projects and without delaying until the completion of the latter.

Turning, now, from the postponement planned in September, 1930, by the Sanitary District, to the actual performance, it is clear that it has been almost negligible when compared with such a huge project.

According to the Semi-annual Reports of the Sanitary District, the expenditures on the Southwest Side Project have been:—

April 21 to December 1, 1930	$43,575.46
December 1, 1930 to December 1, 1931	37,411.58
December 1, 1931 to December 1, 1932	6,319.61
	$87,306.65

These were made in the efforts at acquisition of a site, in reinvestigation of the Stockyards and Packingtown wastes, and in studies for the Southwest Side plant and in some adaptations of West Side plant designs to Southwest Side uses.

Lack of money has been no part of the cause of postponement of the construction of the Southwest Side Treatment Works. That construction did not overtake the money available.

The investigation into the Stockyards and Packingtown wastes, the Sanitary District at no time has contended, justified a delay as a single factor until January 1, 1936, in the construction of the Southwest Side Treatment Works. A further investigation into these wastes did not justify a delay until January 1, 1935, in the construction of the Southwest Side Treatment Works. A few months at most was deemed by the Special Master enough for this in 1929 (Re-reference Report, p. 55). There has been no change since, as to this.

The Sanitary District if investigating on its own time while in the rightful use of its own water and continuing no wrong to the complainants, could be commended for taking reasonable steps to bring its information concerning these wastes to the best point attainable, before de-

signing these huge works. This was not the situation. The wrong to the complainants was continuing. The information wanted was largely to enable the Sanitary District to design works, the most unobnoxious to the neighborhood, in operation and the most economical to construct and to operate, with due regard for efficiency. The information was wanted for the benefit of the Sanitary District and not for the benefit of the complainants.

The other delays were so effective, that the halting search for information concerning these wastes has not delayed construction.

As it now turns out, the failure to purchase or to condemn a site for the Southwest Side Treatment Works has not delayed construction. This is because the Sanitary District has altered its plans.

The Re-reference Report (p. 12) outlines the process of treatment and disposal under the program which the defendants submitted to the Special Master in 1929, from the arrival of the raw sewage at the intake pumps of the Works to the departure of the effluent, from 85% to 90% purified, to the Sanitary Canal and of the dried sludge to fertilizer or to land dumps.

The Sanitary District now brings forward new methods, which it asserts to be more economical both for construction and for operation. These do not affect the character of the effluent to the Sanitary Canal. They are for the disposal of the solids and of the sludge containing them.

In general, the new method follows the old for the effluent and for the accumulation or settlement of the sludge, except that the Imhoff tanks need not be installed and less expensive sedimentation tanks omitting the digestive features, take their place.

The departure from the process considered in 1929 is in the method of handling the wet sludge from the tanks. The 1929 process took it after digestion, to open air drying beds to be dried by drainage and by evaporation and to be

removed mechanically when dried. The new process dewaters and incinerates the sludge without digestion.

The avoidance of grounds for complaint from the neighborhood, the reduction in drying area and the lessened cost to construct and to operate are the objects sought.

The new process conditions the wet sludge by chemicals and conveys it to a revolving drum filter which removes a large amount of water. The remaining cake is stripped off and conveyed to a rotary heat drier to reduce the moisture to a low point. The nearly dried cake then is conveyed to a furnace which burns it as fuel to produce the heat for the drier. This leaves for disposal, only the ash or clinker, inert and practically free from organic matter.

A life-sized experiment begun in a practical way in August, 1932, is now going on at the West Side Treatment Works. The engineers of the Sanitary District believe that it is a success but that it will take an entire year from August, 1932, with its seasonal changes, to prove it.

Already, a sub-experiment is going on, to substitute roller presses for the drying drum, sufficiently to expel the moisture to reduce the sludge to burnable condition. Comparative economy is the object.

Under the program of 1929, the North Side Treatment Works was to pump its sludge to the West Side Works. This is done now. Extensive acreage was necessary at the West Side site for drying the sludge to be produced at the two plants and for a reserve for future growth. The same was true for the site of the contemplated Southwest Side Treatment Works.

If this can be avoided by the new process, then, the West Side site is large enough to incinerate the sludge from the North Side Treatment Works and to accommodate the West Side Treatment Works and the Southwest Side Treatment Works; and the two can be operated to some extent as one plant. The construction of the West Side Treatment Works has advanced too far, for a complete economical consolidation of the two.

From the standpoint of saving expense to the Sanitary District, further experimentation before decision, design, and construction is reasonable, but not so, with regard for the rights of the complainants and for the decree of April 21, 1930.

The opinion of the engineers of the Sanitary District now is that the incinerating process is a success and that the District will provide no more sludge digestion tanks and no more drying beds unless something appears before next summer to change this opinion and that the Southwest Side Treatment Works should be placed wholly on the present West Side site.

The Trustees of The Sanitary District, without as such taking any action, have decided virtually, to place the Southwest Side Treatment Works wholly on the presently owned West Side site, and to incinerate the greater part of the sludge from the North Side, West Side and Southwest Side Works.

It is only by the exercise of unusual diligence that the time already lost to progress on the Southwest Side Treatment Works can be counteracted and the Works completed before December 31, 1938. They can be completed by that date if the work of design and construction begins before July 1, 1933, and is pressed vigorously. It is doubtful whether otherwise, they can be completed before 1939.

Although the scope of the Order of December 19, 1932, discourages any detailed reference to the West Side, Calumet, and Des Plaines Projects, it is to be noted for its bearing on the program for the Southwest Side Project, that all are far behind schedule. Measured by expenditures in comparison to total estimates, about 16% of what should be done on these other projects before December 31, 1935, has been done. Unless effort and expense are enlarged concurrently on all the Projects, the decreed reduction in diversions will produce conditions the avoidance of which was the sole object of the time indulgences by the Court.

Returning now to the September 10, 1930 charted plan, of the Sanitary District to postpone the beginning of construction of the Southwest Side Treatment Works to January 1, 1935, and assuming sincerity in the representations of the Sanitary District to the Special Master in 1929, of the time required to complete, I am forced to find and do find that there was not a reasonable prospect that such a plan would result in the actual completion of the Southwest Side Treatment Works on or before December 31, 1938.

For these several reasons, I find the causes of the delay in providing for the construction of the Southwest Side Treatment Works to be as stated above in the first paragraph under heading 2 A, of this section.

2 B: The Steps Which Should Now be Taken for Such Construction or, in Case of a Change in Site, for the Construction of an Adequate Substitute.

The most effective step is an enlargement of the decree of April 21, 1930 by the addition of a paragraph enjoining the State of Illinois to provide forthwith the necessary money for, and through the Sanitary District of Chicago or through other instrumentality chosen by the State, forthwith to determine upon and secure the site for the Southwest Side Treatment Works, if the site is not owned already by the Sanitary District and forthwith to design and to construct said Southwest Side Treatment Works of the kind proposed to the Special Master of this Court in 1929 or of a kind no less efficient for the purification of the effluent to be discharged to the Sanitary Canal and at a rate of progress forthwith that except for casualties not now foreseeable will result in the completion of said Works and the beginning of their operation in ordinary course before December 31, 1938.

The reasons in support of this step are set out under section 1 B of this report. Some of them apply with greater force here because it will be more difficult for the Sanitary

District to raise more than $60,000,000 for the construction of the Southwest Side Treatment Works than $4,000,000 for the construction of the Controlling Works.

The Sanitary District opposes an order to the State of Illinois to provide the necessary money and to construct the Southwest Side Treatment Works, on the alleged grounds that the obligation is not the State's and that the Sanitary District has determined to construct these works on the West Side site which it now owns and is prepared to construct these Works as soon as the necessary funds which the District is endeavoring to get are available, and ample time remains for this construction assuming that funds will be available and that a finding that the District will not obtain the necessary funds or will not construct these Works by December 31, 1938 is premature and unwarranted.

I find that the steps which should be taken now for the construction of the Southwest Side Treatment Works or in case of a change in site, for the construction of an adequate substitute, are the enlargement of the decree of April 21, 1930, by the addition set forth at the beginning of this section 2 B.

3 A: The Financial Measures on the Part of the Sanitary District Which are Reasonable and Necessary in Order to Carry out the Decree of this Court.

Hereinafter, I refer to financial measures which are open to the Sanitary District for later years. The urgency for money at once, makes it desirable to deal first with what should be done before July 1, 1933.

If the financial measures hereinafter set out are required of the State of Illinois, it is not reasonable to require the Sanitary District to take any financial measures now, in addition to those which it is taking.

The financial problem now before the District is to get enough money to complete, largely before December 31, 1935, and wholly before December 31, 1938, works which

will cost hereafter $139,000,000 according to the latest estimate made by the Sanitary District. No finding is made as to the correctness of this estimate.

According to the estimate of 1929, the cost for work after April 21, 1930, the date of the decree, was to be $179,744,-438.58 (Return filed Nov. 7, 1932, p. 12). From that date to October 14, 1932, there was expended against this $10-691,605.93 (p. 13). The cost of the work still to be done October 14, 1932 was re-estimated at $154,350,500 (p. 55). The substitution of incineration for sludge drying is estimated to reduce this by $9,775,000 (p. 57). The original estimate for Miscellaneous Plants and Sewers $10,000,000 was reduced October 14, 1932 to $8,000,000 (p. 55). The estimate of February 1, 1933 reduces this to $2,000,000. The difference of $6,000,000 plus the $9,775,000 taken from the $154,350,500 leaves approximately $139,000,000.

The Sanitary District has no way to get money now except from taxes or from loans. It has resources in rentals from leased lands, in saleable lands, in saleable stone from spoil banks, and in electrical energy sold to others. As a present source of ready money in a large way these are negligible. The current rents are $65,000 annually. The gross revenue from electrical energy sold is estimated for 1932 at $1,100,000; but it costs about that amount to produce it.

Before the Sanitary District can make any contract for design or for construction of any works, it must comply with the following conditions:—

1 The Constitution of Illinois and the governing statute each limits the indebtedness of the District, as a municipal corporation (*Judge* v. *Bergman,* 258 Illinois 246, 251; *The People* v. *Nelson,* 133 Illinois 565, 582, 583, 590, 595, 598), to five percent in the aggregate on the value of the taxable property therein, to be ascertained by the last assessment for State and county taxes, previous to the incurring of such indebtedness (*Constitution,* Article IV,

section 12; *Cahill's Illinois Revised Statutes,* 1931, Chapter 42, Para. 345).

2 The District may levy taxes for corporate purposes upon the property within the territorial limits of the district not to exceed in the aggregate in any one year, exclusive of the amount levied for the payment of bonded indebtedness and interest thereon, one third of one percent of the value of the taxable property within the corporate limits as the same shall be assessed and equalized for the county taxes for the year in which the levy is made (Chapter 42, Para. 349), or approximately, now $12,666,666, subject to a down-scaling requirement which may reduce it to $5,700,000.

3 The District may not, with exceptions immaterial here, issue bonds unless the proposition to issue such bonds shall have been first submitted to the legal voters of the District and shall have been approved by a majority of those voting upon the proposition. This restriction does not apply to bonds for $7,614,000 unsold balance of an issue of $27,000,000 authorized without referendum, in 1929 by the General Assembly or to bonds of $36,000,000 authorized in 1931 by the General Assembly, in confirmation of a referendum, questioned by a recount petition (Chapter 42, Para. 345).

4 The District must make its annual appropriation ordinance in January. It shall not make any appropriations thereafter (Chapter 42, Para. 341, (6) Sec. 5 f.).

5 The District has no power to make any contract or to do any act which shall add to the District expenditures or liabilities in any fiscal year, any thing or sum over and above the amount provided for in the annual appropriation ordinance for the fiscal year. There are exceptions not material here (Same Section).

6 No Contract shall be made or expense liability incurred by the board of trustees or any member or committee thereof, or any person or persons, for or in its behalf, notwithstanding the expenditure may have been ordered by

the board unless an appropriation therefor shall have been previously made by said board in manner aforesaid. Any contract verbal or written, made in violation of this section shall be null and void. Nothing herein contained shall prevent the making of contracts for the lawful purposes of the district, the terms of which contracts may be for periods of more than one year, but any contract so made shall be executory only for the amounts for which the said district is lawfully liable in succeeding fiscal years (Chapter 42, Para. 341 (7), Sec. 5g).

7 In no event shall the total aggregate expenditures in the budget exceed the total means of financing the said budget (Chapter 42, Para. 341 (6), Sec. 5f).

For the reasons hereinafter stated, the Sanitary District is powerless in March 1933, to contract for the design or for the construction of Controlling Works, or for the construction in a large way of the Southwest Side Treatment Works. It is powerless to contract for the design or for the construction of any Works, at a cost, including contracts already made, in excess of $38,086,950.81.

The prerequisite ordinance, for January, 1933 has been passed. This closes down the contractual powers until 1934, to the items therein. This ordinance confines the appropriations for these works to bond issues and their proceeds. Nothing is to come out of the annual tax levy. The amounts appropriated are these:—

Controlling Works, nothing	$0.00
Southwest Side Treatment Works, for Engineering and Designing	57,580.00
Acquisition of land for site	505,940.00
Acquiring land and construction	30,700.00
West Side, North Side, Calumet, Salt Creek Intercepting Sewer, Ninety-fifth Street Pumping Station, North Side Intercepting Sewers, North Branch Pumping Station, West Side Intercepting Sewer, Residue Extension Enlargements and Betterments —many items amounting in the aggregate to	24,822,716.45
	$25,416,936.45

Of these appropriations, the only ones available for the design or for the construction of the Southwest Side Treatment Works amount to $88,280.

The many items making up this $24,822,716.45 are for the detailed purposes stated and to be met from the proceeds of particular bond issues authorized for those particular purposes only, so that the amounts are not interchangeably available.

Of the $24,822,716.45, contracts already let and not yet fully performed will absorb $8,810,500 for work to be done. In addition, there is due, for work already performed, for which payment has not been made, approximately $1,115,000.

The foregoing shows the 1933 limit upon contractual power for additional work, assuming that money could be made available by the sale of bonds.

The tax limit of one third of one percent of $3,800,000,000 valuation is $12,666,000. The 1933 levy for corporate purposes is $4,000,000. No more can be levied now for 1933. This levy is not payable until April 1934 in ordinary course. It cannot be known when it will be made payable under present conditions.

Next to be considered, is the debt limit.

The gross debt limit of the Sanitary District in March, 1933, is not safely over $190,000,000.

The District's valuation for purposes of 1930 taxation was:—

Real Estate	$3,373,275,520
Personal	831,374,743
Railroad's Corp., etc	199,413,184
	$4,404,063,447

This was the last assessment before February, 1933. It is expected that the assessment for 1931 is now completed or about to be, and that it will fix a valuation of approximately $3,800,000,000.

Real estate has been valued for purposes of taxation throughout the State since 1928 at thirty-seven percent of its estimated fair cash market value. The assessed valuation and not the actual, determines the debt limit (*City of Chicago* v. *Fishburn,* 189 Illinois 367, 377).

The Constitutional five percent of this $3,800,000,000 makes the gross limit of $190,000,000.

The Sanitary District, on January 12, 1933, at my request submitted a list of its debts as follows:—

Bonds outstanding:		
Overdue	$8,014,500.00	
Unmatured	99,018,500.00	$107,032,000.00
Interest on overdue bonds	$284,451.07	
Interest on unmatured bonds	5,158,402.50	5,442,853.57
Tax Anticipation Warrants	$8,736,200.00	
Interest thereon	499,938.00	9,236,138.00
Unpaid bills, salaries and wages		1,475,000.00
Construction contracts		8,700,000.00
Electric power contract during remaining 16 of 20 years		29,108,523.00
Lease of General Offices		149,682.72
Lease of Laboratories		4,989.80
Total		$161,149,187.09

These I find to be the debts of the Sanitary District, subject to the qualification that the Supreme Court of Illinois has said that tax anticipation warrants, whereby a municipality promises to pay out of a particular tax already levied are not to be reckoned as debts in determining the existing debts of the municipality, to arrive at the net limit of its borrowing power (*Booth* v. *Opel,* 244 Illinois 317, 327; *Holmgren* v. *City of Moline,* 269 Illinois 248; *City of Chicago* v. *McDonald,* 176 Illinois 404, 418; *Fuller* v. *Heath,* 89 Illinois 296; *City of Springfield* v. *Edwards,* 84 Illinois 626, 633). The warrants issued by the Sanitary District met this requirement.

Deducting this item $9,236,138 from the $161,149,187.09 leaves $151,913,049.09. Deducting this from the gross limit of $190,000,000 leaves the unexhausted power of the Sanitary District to incur debts, limited to $38,086,950.81.

The complainants contend that the deduction of $29,-108,523 for the power contract should not be made. The defendants claim that a deduction should be made but that it should be refigured at $19,000,000. The facts follow.

Under date of December 22, 1927, the Sanitary District made a contract with the Public Service Company of Northern Illinois whereby the District agreed to take and the Company agreed to supply electric power for all the work of the District both construction and operation, with exceptions immaterial here, over a period of twenty years from a fixable date between May 1, 1928 and May 1, 1929 at a stated unit price, slightly variable by a definite formula, based on the cost to the Company of the coal used to generate the power. For present purposes the only element of uncertainty was as to the amount of power which the work of the District would require. This would determine the amount to become payable under this contract.

The Supreme Court of Illinois has held that, for debt limit purposes, such a contract liability if sufficiently certain in amount, expressly or computably in advance, is an indebtedness for the full amount that will become payable under it, throughout the period covered (*Wade* v. *East Side Levee and Sanitary District,* 320 Illinois 396, 403-405; *Evans* v. *Holman,* 244 Illinois 596; *Schnell* v. *City of Rock Island,* 232 Illinois 89, 97; *City of Chicago* v. *Galpin,* 183 *Illinois* 399, 404, 407; *Law* v. *The People ex rel. Huck, Collector,* 87 Illinois 384, 396; *City of Springfield* v. *Edwards,* 84 Illinois 626, 632; but see *East St. Louis* v. *The Coke Company,* 98 Illinois 415, 430, and *City of Carlyle* v. *Carlyle Water, Light and Power Co.,* 140 Illinois 445, as explained in later decisions).

The degree of uncertainty as to the amount to become payable under the present electric power contract is

greater than in the nearest of the decisions cited; but no prudent lender would hazard the chance that the Supreme Court of Illinois would hold this contractual obligation to be a debt. No financial measure now is reasonable that does not treat this obligation as a debt.

The amount of this debt cannot be demonstrated now. It must be estimated. In 1929, an estimate was made by the Sanitary District, of upwards of $33,000,000. This amount has been reduced by payments for use to January 1, 1933, so that it has become $29,108,523. On December 27, 1932, I requested the Sanitary District to furnish evidence of its present debts. On January 12, 1933, in response, the Sanitary District furnished the list which included this item in this amount. On January 30, 1933, the Sanitary District presented a schedule, to show its contention as to its ability to finance the treatment and controlling works program. In this schedule the electric power contract obligation is included as a debt of $19,000,000 and no more. The decline of $10,000,000 invited attention.

On January 13, 1933, the Chairman of the Committee on Finance of the District and the Assistant Chief Engineer of the District set themselves to forecasting a way to finance this project. For some time, the Engineering Division of the District had observed that some of the major processes of disposal were requiring less electric power than had been estimated. The electric power contract obligation was reestimated in the light of this information, and at $19,000,000. It is futile to determine now, which estimate is the nearer right. The future may support either or one between. An estimate born so suddenly and under such stress has not matured long enough to make it a safe one to take, in determining what now are reasonable or necessary financial measures. On present appearances, no prudent lender will rate this obligation at less than $29,108,523.

Accordingly I find that in March, 1933, the unexhausted power of the Sanitary District to incur debts is limited to $38,086,950.81. If I am in error, and the electric power

contract liability should be reckoned at $19,000,000 only, the limit is $48,195,473.81.

This sum is not to be increased by cash on hand or by taxes levied, due and uncollected (*Wade* v. *East Side Levee and Sanitary District,* 320 Illinois 396, 415).

In consuming this borrowing capacity of $38,086,950.81, a revolving sum must be kept in reserve to cover periods of duplication. If the District sold bonds now for $38,086,950.81, it could make no more contracts for design or for construction, because these contracts would become at once, debts, contingent on performance by the contractor, notwithstanding the fact that the bonds had been sold and that the money proceeds were in hand to meet the contract obligations when they became payable. On the other hand, if contracts for design or for construction are made in the amount of $38,086,950.81, no more bonds can be sold. Both contracts and bond sales must fall enough short of the limit at all times to avoid this. A close approach to the limit can be attained by selling the bonds in small quantities and applying the proceeds at once to reducing the contract obligations until the contract amounts have been paid and the bond debts to the limit have taken their place. The Supreme Court of Illinois has said that if bonds were sold to the limit for a building fund and then a contract for building is made, by which the contract price is to be paid only from that fund, the contract is not invalid (*Hartmann* v. *Pestotum School District,* 325 Illinois 268, 279).

There is a possibility that the Sanitary District may acquire more bonding power later, by paying off existing debts, from collections of delinquent and future taxes, as far as they are applicable to such a purpose.

On January 1, 1933, the Sanitary District had in its treasury $88,457.80. The delinquent taxes due it were:—

For	1928.....	$3,670,957
	1929.....	7,317,089
	1930.....	9,985,440
		$20,973,486

The Sanitary District in January of each year, 1930 to 1933 inclusive, levied taxes as follows:—

	Bonds		*Corporate*
	Principal	*Interest*	*Purposes*
1930.....	$8,937,500	$7,080,391.25	$7,098,900
1931.....	9,330,500	7,972,713.75	8,000,000
1932.....	9,429,500	5,511,961.25	7,000,000
1933.....	9,493,500	5,473,738.75	4,000,000
(on defaulted bonds)..		170,625.05	
(on defaulted coupons)		112,941.73	

In 1930, the Sanitary District levied also $600,000 for water power improvements. On March 12, 1931, this levy was cancelled.

On March 12, 1931, the bond levy of 1930 was reduced to $8,497,500 for principal and $6,129,203.75 for interest.

On October 6, 1932, the bond levy of 1931 was reduced to $8,208,500 for principal, and $5,667,453.75 for interest, and the corporate levy for 1931 was reduced to $5,000,000.

These reductions in the bond levies were against bonds which have been ordained for issue but which have not been sold.

These taxes when received will be available for the particular purposes only for which they were levied. Subject to this, from them, there should be paid:—

Tax anticipation warrants (the payment of which will not release any bonding power, because they have not been deducted)	$9,236,138.00
Bonds—principal in default January 1, 1933.....	8,014,500.00
Bond interest in default January 1, 1933.....	5,442,853.57
Unpaid bills, salaries and wages	1,475,000.00

These items call for more than $24,000,000. If this were paid, it would lift the bonding power about $15,000,000.

The Sanitary District states that the amounts which will be available for payment of defaults of principal and of interest on bonds, if and when delinquent and 1931 taxes are paid in full, are as follows:—

From delinquent taxes for 1928-30	$10,716,715.29
From taxes for 1931	9,520,953.75
	$20,237,669.04

This is not enough to cure past and 1933 coming defaults. They are:—

January 1, 1933 principal	$8,014,500.00
Interest	5,442,853.57
1933 maturities principal	6,840,500.00
Estimate for interest	5,000,000.00
	$25,297,853.57

The only resource to cover the $5,000,000 shortage, is tax anticipation warrants against taxes already levied for 1932 and 1933. The prospect for the sale of these in any such amount is very poor.

The Sanitary District represents that it is about to apply to the General Assembly for authority to issue bonds, without a referendum, to refund its bonds and coupons now in default. On February 16, 1933, the Board of Trustees approved a draft of an amending act for this purpose and instructed the Law Department to cause its introduction in the General Assembly. This draft provides for refunding bonds at not exceeding six percent, to be issued and sold or exchanged at par for maturing bonds, without a referendum.

Each year should reduce the electric power contract obligation to the extent of the power used and paid for. This has been estimated at $700,000 a year during the next five years. It does not appear how accurate this estimate is.

If money could be obtained from new bond sales to pay for the unperformed balance of the outstanding construction contracts it would lift the bonding power $8,700,000.

Liability for the rents under leases should be diminished annually by payment.

Outstanding unmatured bonds are to mature in

1933	$6,840,500
1934	7,209,500
1935	7,211,500
1936	7,109,500
1937	7,103,500
1938	6,934,500

These should be paid as they mature. If they are paid they will release a corresponding amount of borrowing power.

Meanwhile, new bonds for more must take their place, for money to carry out the construction project. The new bonds must be made payable within twenty years. They need not be made payable in equal amounts annually.

Any improvement in the borrowing limit is dependent on getting payment of taxes. The prospect for this is colored by the situation not only in the District itself but in Cook County with which the District is nearly coterminous.

Within this County, there are about four hundred and twenty tax levying bodies, the largest of which is the City of Chicago which is almost wholly within the Sanitary District.

Within the County as of January 1, 1933 there are funded debts about as follows:—

Cook County	$35,000,000.00
City of Chicago	136,147,400.00
Board of Education of Chicago	30,500,000.00
Forest Preserve Commissioners	13,594,000.00
Commissioners of Lincoln Park	18,552,000.00
West Chicago Park Commissioners	11,475,000.00
South Park Commissioners	56,607,000.00
Sanitary District	107,032,000.00

A partial list of current liabilities is about as follows:—

Cook County	$30,000,000.00
City of Chicago	144,955,311.00
Sanitary District	16,153,991.57

Bonds of Cook County are in principal default for $1,398,500, and those of the Sanitary District for $8,014,500.

For this region there is needed, not including payment of maturing bonds and interest, for current corporate operations, annually about as follows:—

Cook County	$18,000,000.00
City of Chicago	82,600,000.00
Board of Education	78,000,000.00
Sanitary District	7,500,000.00

This incomplete statement does not include any bonded debts, current debts, or operating requirements for the other contained municipalities, some sixty within the Sanitary District alone (Re-reference Report, p. 5).

The Chairman of the Illinois Emergency Relief Commission, created by an act of the legislature as of February 6, 1932 has estimated the needs for unemployment relief in Cook County for 1933 at $80,000,000.

A two percent retail sales tax is under consideration for this purpose, and estimated to yield for the State $40,000,000. Cook County has obtained or is to obtain in 1933 from the Reconstruction Finance Corporation $17,000,000 on Poor Relief Bonds, not included in the above funded debt of Cook County for January 1, 1933. These Poor Relief Bonds are payable out of one cent of a three cent gasoline sales tax.

For Cook County and its contained municipalities the total direct taxes, levied, collected or delinquent for 1928-30, are as follows:—

	1928	1929	1930
Tax Spread ..	$233,162,829.54	$260,544,670.22	$290,284,505.85
Collections ...	187,096,429.20	193,556,235.57	174,170,703.51
Delinquent ...	$46,066,400.34	$66,988,434.65	$116,113,802.34
Percent delinquent ..	19 plus	25 plus	40

The taxes levied for 1931, are just going into collection in February or March, 1933.

The total tax spreads above, include the portion of the State tax which falls on Cook County.

There is a plan afoot to spread payment of two years back taxes over a period of five years.

For five years, the constituted authorities in Cook County have encountered great difficulties in collecting taxes. The validity of the levies has been in litigation (*Bistor* v. *Board of Assessors,* 346 Illinois 362, certiorari denied in United States Supreme Court; *People ex rel McDonough County Collector* v. *Cesar,* 349 Illinois 372, certiorari denied February 6, 1933 in United States Supreme Court). This is not all ended. It is believed locally, that payment of taxes is improving. Even so, the prospect is not bright for the collection of taxes fast enough to enable the Sanitary District greatly to improve its borrowing power soon, through reducing its existing debts by payments.

Its present gross debt limit of $190,000 is dependent on a valuation for 1931 of $3,800,000,000 as compared with $4,404,063,447, for 1930. A reduced valuation for 1932 and later years is not improbable.

The Sanitary District contends that it can carry out the construction program within its debt limit. To support this contention the District on January 30, 1933 submitted a schedule dated January 24, 1933 to show its future financial capacity. The testimony is that the work on this schedule was begun on January 13, 1933. This is the schedule:—

"January 24, 1933.

Capacity of The Sanitary District of Chicago to finance the Government Sewage Treatment Program by the end of 1938, amounting to $139,000,000.

Total Debt Incurring Capacity 5% of $3,800,000,000. (Estimate for 1931 valuation, final figure not as yet available			$190,000,000
Encumbered Debt Incurring Capacity			
Bonds Outstanding		$107,032,000	
Other Liabilities—			
Power Contract	$19,000,000		
Construction Contracts	8,810,500		
Miscellaneous	1,000,000	28,810,500	
Total Encumbered Debt Incurring Capacity			135,842,500
Unencumbered Debt Incurring Capacity			$54,157,500
Increase in Debt Incurring Capacity during 1933 to 1938, inclusive, through Retirement of part of Present Outstanding Bonds—			
Year	*Retirement of Principal*		
1933	$14,853,000		
1934	7,209,500		
1935	7,211,500		
1936	7,109,500		
1937	7,103,500		
1938	6,934,500	50,421,500	
Through Reduction of Power Contract Liability at annual rate of $500,000		3,000,000	
Through completion of existing contracts		8,810,500	
Through retirement of part of $139,000,000 of new bonds to be sold—			
Year	*Retirement of Principal*		
1934	$700,000		
1935	1,700,000		
1936	2,750,000		
1937	3,950,000		
1938	5,200,000	14,300,000	
Increase in Debt Incurring Capacity, 6 years at Annual Rate of $4,000,000		24,000,000	
Total Increase in Debt Incurring Capacity—1933-1938			100,532,000
Total Debt Incurring Capacity Available			$154,689,500"

The unwarranted optimism which gave birth to this schedule renders it unconvincing. It omits debts for overdue interest	$5,442,900
It shortens unpaid bills, salaries and wages	475,000
It shortens the estimate on the electric power contract	10,108,523
	$16,026,423
It assumes that all defaults will be cured without incurring further interest liability. It assumes that all maturities 1933 to 1938 will be met as they come. So it assumes that outstanding bonds will be paid off to the extent of	$50,421,500
It assumes that bonds hereafter sold will be paid off before January 1, 1939 to the extent of	14,300,000
It assumes that assessed values in the District will increase by $480,000,000, thus increasing the gross debt limit by	24,000,000
Thus the hopes exceed the prospects by a sum that, if times remain evil,—possibly may come to be...	$104,747,923

The prospect, highly colored by the best hopes within reason, is that the Sanitary District will be unable financially to construct these Works before December 31, 1938.

This is so, because of the legal limit on its borrowing power. Next to be considered is the market limit.

Even if within the legal limit, the only unsold issues which have been authorized are:—

Unsold balance of $27,000,000 authorized in 1929	$7,614,000
Authorized in 1931	36,000,000
	$43,614,000

Even within the limit of $38,086,950.81, these are the only bonds which can be sold without a further ordinance of authorization and a popular vote or an enabling act of the General Assembly.

The authorized but unsold bonds are not saleable except at a very heavy discount. Since the default on the bonds, they have sold in the fifties. It would not be possible to obtain as much as seventy for any considerable block of them. Until all defaults of principal and interest are cured,

these bonds are not normally marketable, even at a considerable discount.

The Sanitary District has applied to the Reconstruction Finance Corporation to buy bonds for $36,450,000, of those already authorized for issue. This is for specified uses:—

Calumet Project	$13,674,000	
West Side Project.....	22,426,000	
North Side Project	350,000	$36,450,000

This application has been denied on the ground that the project is not self-liquidating.

On December 6, 1932, a bill was introduced in the House of Representatives of the United States (H. R. 13315) and referred to the Committee on Banking and Currency, to amend Paragraph 1, Section 201, Title 2 of The Emergency Relief and Construction Act of 1932 to dispense with the self-liquidating requirement, in loans to municipalities and certain others on certain conditions, "to aid in financing projects necessary to public health or welfare, heretofore authorized under Federal, State, or municipal law." On February 3, 1933, the Committee held a hearing on this bill.

On January 27, 1933, in reply to my inquiry, the Chairman of the Board of the Reconstruction Finance Corporation wrote as follows:—

"I have your letter of January 20, 1933 requesting information with regard to an application for a loan submitted to this Corporation by the Sanitary District of Chicago.

"Section 201 (a) of the Emergency Relief and Construction Act of 1932 expressly prohibits taxation as a source of revenue for the purpose of rendering a project financed by this Corporation self-liquidating. In view of the fact that the Sanitary District is financed almost entirely by revenues directly derived from taxes imposed by such District, therefore, this Corporation is without authority under the statutes defining its powers to make a loan of the kind requested by the District.

"Any amendments to the legislation controlling the functions of this Corporation are, of course, a matter entirely for the determination of the Congress and it would, therefore, be impracticable for officials of this Corporation to attempt to express any opinion as to the prospects for the success of the application in question as a result of any changes in the present law which the Federal Legislature may see fit to make."

The Representative who introduced House Bill 13315 stated that the prospect is poor for getting the bill out of committee in the Seventy-second Congress but that there is some reason to believe that the Senate may pass a similar measure in time for concurrence by the House. March 6, 1933 he advised that the House had not acted on concurrence.

The complainants contend that the financial plight of the Sanitary District rests squarely upon self-created or self-controllable obstacles on the part of the defendants particularly in that the District's financial difficulties rest upon a failure to collect normal taxes, as were collected elsewhere in the State of Illinois, by officers or political agencies of the State of Illinois for the performance of which duties the responsibility rests squarely upon that State.

I find that the Sanitary District is not responsible for this.

The unmarketability of its bonds is due to the default of principal and interest. They were regarded as triple A bonds, by reliable bankers, before the default. The default is due to the nonpayment of taxes assessed for their payment. The Sanitary District has no powers of collection. The treasurer of Cook County is the collector (Cahill's Ill. Rev. St., Ch. 120, Par. 162, p. 2336). He is required to pay over the collections of the District's taxes to the treasurer of the District (Cahill's Ill. Rev. St. 1931, Ch. 42, Par. 349, p. 1208).

The Constitution fixed the gross debt limit beyond the control of the Sanitary District. Before the end of 1928, the General Assembly took away the authority of the Sanitary District to issue bonds, after December 31, 1928 without a referendum. In 1929, the General Assembly provided that the Sanitary District of Chicago may from time to time issue bonds, without submitting the issuance thereof to the voters of said district for approval, for an amount not to exceed in the aggregate twenty-seven million dollars ($27,000,000) (exclusive of any other bonded indebtedness of said district) for the completion, enlargement and/or construction (including the payment of existing contract liabilities and the acquisition of sewer easements) of the several Treatment Works, now under consideration.

This contained no authorization of the use of any of this $27,000,000 for Controlling Works.

The Sanitary District made an attempt to obtain from the Legislature, an unlimited exemption from the requirement of a referendum, before issuance of bonds for loans to be applied exclusively to the construction of these Treatment Works. On May 15, 1930, the District passed the resolution following:—

"WHEREAS, the Supreme Court of the United States, on April 14, 1930, rendered an opinion in the case of *Wisconsin, et al,* v. *Illinois, et al,* which requires The Sanitary District of Chicago to reduce its diversion of water from Lake Michigan through the Chicago River on July 1, 1930, to 6500 cubic feet per second plus pumpage, and on December 31, 1935, to further reduce said diversion to 5000 cubic feet per second plus pumpage, and on December 31, 1938, to still further reduce said diversion to 1500 cubic feet per second plus pumpage; and

WHEREAS, The Sanitary District of Chicago is required under said opinion to file with the Clerk of the Supreme Court of the United States semi-annually on July 1 and January 1 of each year, beginning July 1, 1930, a report adequately setting forth the progress made in the construc-

tion of the sewage treatment plants and appurtenances outlined in its sewage treatment program, and also setting forth the extent and effects of the operation of the sewage treatment plants respectively that shall have been placed in operation, and also the average diversion of water from Lake Michigan during the period from the entry of its decree to the date of such report; and any of the parties to the above suit may apply to the court for such action or relief as may be deemed to be appropriate with respect thereto; and

WHEREAS, the said sewage treatment program consisted of the construction of the following plants and structures:

(a) The North Side Sewage Treatment Works, with appurtenances.

(b) The Calumet Sewage Treatment Works, with appurtenances.

(c) The West Side Sewage Treatment Works, with appurtenances.

(d) The Southwest Side Sewage Treatment Works, with appurtenances.

AND WHEREAS, the Supreme Court of the United States held:

> 'The defendants have submitted their plans for the disposal of the sewage of Chicago in such a way as to diminish so far as possible the diversion of water from the Lake. In the main these plans are approved by the complainants. The master has given them a most thorough and conscientious examination. But they are material only as bearing on the amount of diminution to be required from time to time and the times to be fixed for each step, and therefore we shall not repeat the examination. It already has been decided that the defendants are doing a wrong to the complainants and that they must stop it. They must find out a way at their peril. We have only to consider what is possible if the State of Illinois devotes all its

powers to dealing with an exigency to the magnitude of which it seems not yet to have fully awaked. It can base no defenses upon difficulties that it has itself created. If its constitution stands in the way of prompt action it must amend it or yield to an authority that is paramount to the State.'

AND WHEREAS, The Sanitary District of Chicago in its relations with the United States Government has reached a crisis which requires that it expend millions of dollars to acquire the necessary sites for said sewage treatment plants, to construct and complete the same, with appurtenances thereto and sewers connected therewith, and incur the necessary engineering and other expenses, which sum of money must be obtained from time to time by bond issues as required, on or before December 31, 1938; and

WHEREAS, under existing laws, The Sanitary District of Chicago cannot pass ordinances for the issuance of bonds and obtain money thereunder without obtaining authority from the people by a referendum vote on each bond issue; and

WHEREAS, under the mandatory requirements of the Supreme Court of the United States, such a referendum would answer no useful purpose, inasmuch as now the people have no discretion whatever in the premises and such sewage treatment plants must be constructed; and

WHEREAS, The Sanitary District of Chicago has not sufficient funds to proceed with and carry out that part of its sewage treatment program which embraces the year 1930, and will not have any money which would enable it to carry out said sewage treatment program during the year 1931 without submitting the same to a referendum of the people, and as a result, no contracts can be awarded to carry out said program for the year 1931 and succeeding years; and

WHEREAS, to carry out the sewage treatment program of The Sanitary District within the time required by the Supreme Court decision, The Sanitary District of Chicago

will be required, for the next 6 years, to sell bonds for and expend an average of $20,000,000.00 per year.

Now, Therefore, be it Resolved, That the Board of Trustees of The Sanitary District of Chicago, in regular meeting assembled, request that the Governor of the State of Illinois call a special session of the General Assembly of the State of Illinois, and include in his call a provision to revise the existing laws governing The Sanitary District of Chicago, so that it will be able to procure the necessary funds to carry out its sewage treatment program above set forth, and to issue bonds therefor without submitting the issuance of said bonds to a referendum of the people, and that The Sanitary District of Chicago can issue such bonds for said sewage treatment program to comply with the decision of the Supreme Court above referred to."

This contained no provision for Controlling Works.

This attempt failed.

In July, 1931, the General Assembly, in confirmation of a successful referendum, questioned by a recount petition, authorized an issue of bonds for $36,000,000 without popular vote, but only for these purposes, including appurtenances, namely:—

West Side Sewage Treatment Works	$11,000,000
Calumet Sewage Treatment Works	20,300,000
Southwest Side Sewage Treatment Works	3,100,000
North Side Sewage Treatment Works	1,600,000
	$36,000,000

The Sanitary District has tried to get the money to design and to construct the Treatment Works, but not the Controlling Works.

But responsibility or none does not change the situation of impotence for the time being, of the Sanitary District.

In the conditions which now exist, there is no reasonable financial measure which The Sanitary District can take, which it is failing to take.

Sources for Financing in Later Years.

Under existing legislation, the possible financial resources of the Sanitary District are:—

1. Borrowings within The Constitutional debt limit,
2. General tax levies,
3. Special assessments,
4. Service charges.

1. Borrowings Within the Constitutional Debt Limit.

It is possible (a) that the constitution of Illinois may be amended, if an amendment is submitted and adopted at the general election in November, 1934 to increase the debt limit of the Sanitary District for this particular purpose, and (b) that under existing law the actual limit can be more than doubled by a true valuation of real estate for purposes of taxation.

It is obvious that neither of these methods is within the control of the Sanitary District and that the first is not within the control of the General Assembly. There is no present prospect that either will be pursued voluntarily.

If the Supreme Court of the United States could and did enjoin the Sanitary District or the General Assembly to advocate or to submit an amendment for this purpose, it is not likely that it would produce the adoption of the amendment unless at least this Court had made clear that the cost of this project will fall on the State, if it is not met by the Sanitary District. It is not the best method of financing within sight, and it is not a reasonable method and it is not necessary.

The valuations of real estate for purposes of assessment could be more than doubled without any change in the law, if the public officials charged with the duty of making the valuations were persuaded or were forced to increase them. The existing statute (Cahill's Illinois Revised Statutes (1931), Chap. 120, Para. 1-4, Secs. 1-4, Para. 329, Sec. 18)

provides that property "shall be valued" personal property at its fair cash value and real estate "at its fair cash value, estimated at the price it would bring at a fair, voluntary sale".

Notwithstanding these statutes, real estate is valued systematically for assessment, at thirty-seven percent of its value. Any attempt to change this policy would involve a survey of the general legislation and economics of the State. Debt limits within the Constitution and tax limits have been fixed by the General Assembly at percentages set with regard to the way in which valuations were being made for purposes of taxation. At times there have been attempts at legislative direction that assessed values should be fixed at one-fifth of the full values (*City of Chicago* v. *Fishburn,* 189 Illinois 367, 375).

In order to get these works constructed, it is not necessary to invade this state-wide policy of the State. A financial measure which required such an excursion would not be reasonable. Such a measure is not necessary.

2. General Tax Levies.

The prospect is that within its taxing limit as now set by statute, the Sanitary District can acquire by future tax levies, little if any money for this project. This limit is within the control of the General Assembly and can be raised indefinitely, as far as appears. The District is confronted by two statutory limits, the first express and the second finally ascertainable when other taxing bodies within Cook County have made their levies. By the first, the District is limited to one-third of one percent of the assessed value of the taxable property in the District in addition to bond principal and interest requirements (*Infra,* Para. 349). On the expected valuation of $3,800,000,000 for 1931, this limit would be $12,666,666. By the second, with many exceptions, the levy by all assessing bodies on taxable property within any part of Cook County is limited

to one percent in the aggregate of the assessed value of the property in that part (*Infra,* Para. 362). Under this law, after the levies are made, they must be scaled down far enough to come within the limit. This scaling as to the Sanitary District must stop so that its levy is not forced below fifteen cents on each one hundred dollars of assessed valuation, in addition to bond principal and interest requirements. Until the levies for a given year have been made by all the tax levying bodies in the County, the Sanitary District cannot be sure of more than the fifteen cents. On the expected valuation for 1931, this would be $5,700,000. This sum appears to leave no margin above normal annual requirements, for this construction project. If the State is required to meet the cost of this project, it will rest in the discretion of the General Assembly to determine whether the Sanitary District should be given a greater taxing power, to reimburse or to exonerate the State.

3. Special Assessments.

For any improvement, the Sanitary District may levy a special assessment upon property within the District but only to the extent to which the property will be benefitted by the improvement (*Infra,* Para. 350). The proceedings are to conform to Article nine of the Cities and Villages Act of April 10, 1872. (Cahill's Illinois Revised Statutes, 1931, Chapter 24, Article IX). The text of this is so extensive that it is not included hereinafter. There are many reasons which render this special assessment power not a large financial resource for this project. The ordinance under which the improvement is made must provide that it is to be made under the special assessment laws. Liberal time is allowed for publication, public hearings, objections and trial by jury as to amount of benefit to any particular property.

None of the present project has been ordained for special assessment. It would be very difficult if not impossible

to separate future work under the project and relate it in benefit to any particular parcels of property. The best chance for this would be in the case of the Southwest Side Treatment Works and the intercepting sewers to reach them, because this separable part of the project has not yet been undertaken. As to this, it is impossible to say now what if any benefit will come to any particular property from this part of the project. The properties within the Southwest Side area drain through primary sewers, constructed not by the Sanitary District but generally by other municipalities, into the Sanitary Canal, which, as far as it has been constructed by the Sanitary District, has been paid for by general taxation of all the taxable property within the Sanitary District or by proceeds of bond issues met or to be met by general taxation. The intercepting sewers and the treatment works are not to provide any better drainage for any particular properties. They are to make it possible, with protection to health and to public welfare, for the State of Illinois and the Sanitary District to stop its unlawful diversion of water from Lake Michigan.

The Stockyard and Packingtown wastes are discharged in the Southwest Side area. This will call for larger intercepting sewers than otherwise would be necessary but they are the same sewers which are to receive the flow from the primary sewers, which serve the area generally.

It is not reasonable to rely in advance on special assessments as a financial resource available in time for the required completion of this project.

4. Service Charges.

The Sanitary District has no present power under the Statutes to make service charges for receiving from the primary sewers or for treating ordinary sewage in common quantities. All its facilities have been paid for or are to be, by general taxation.

The Sanitary District asserts that before the entry of the United States into the Great War, negotiations were had between the District and the Packers, toward voluntary agreements for the handling or treating of packers' wastes but that these lapsed after April 6, 1917 and that they have not been resumed.

Something more than seven years ago, the Sanitary District proceeded against twenty-three of the packers (*The Sanitary District of Chicago* v. *Chicago Packing Company,* 241 Illinois Appeals 288, June 23, 1926) to enjoin them from disposing of their trade wastes through the Sanitary Channel. A demurrer was sustained. On appeal, the Appellate Court for the First District, Third Division, composed of three Justices, held two to one that the decision below should be reversed because (298) "The proper disposal of sewage by the Sanitary District of Chicago being the primary purpose for which the District was created, authorized the defendants to turn their sewage into the channel of the Sanitary District but does not authorize them to turn into the channel any of their trade wastes that may not be properly designated as sewage" . . . "garbage, offal, flesh, blood, hair, bone, parts of dead animals" are not all of them "sewage". At this point, in 1926, the case fell asleep. Thereupon, the Sanitary District sought and obtained an act of the General Assembly (*Infra,* Para. 343) which empowered the District (a) to regulate and to control the discharge of so-called factory or industrial wastes directly or indirectly into the sewers or works of the District and (b) to contract with industries as to the amount of treatment which the industries shall give their wastes and as to what payments the industries shall make to the District for treatment.

On July 25, 1929, a regulating ordinance was considered by the Sanitary District and it was voted that it be published and deferred. No contracts have been negotiated with industries for treatment of their wastes or for payment to the Sanitary District for such treatment.

It does not appear that the Sanitary District now has power to impose a service charge for treatment. It is dependent on obtaining contracts with industries, entered into voluntarily or under the fear of regulation.

It is stated by the Sanitary District that the Southwest Side area is the only one containing any producers of industrial wastes in unusual quantities. The prospect is that the Sanitary District will not be in a position to furnish treatment to industrial wastes, in any large way, in this area before 1938. Therefore, service charges for treating industrial wastes, are not for some years to come a financial resource.

Even then, the prospect of income from this source is poor, unless legislation is obtained which will empower the District to impose a charge without contract. Any such legislation may encounter the claim that it is the dictum in 241 Illinois Appeals 288, 298, *supra,* that, notwithstanding large volume, only what is not sewage is outside the right of discharge of property owners within the District.

Whether it is a right policy to make a charge to the owners of real estate for the use or for the disproportionate use of works which have been provided in whole or in part by taxation of that real estate, is a question to be settled by the policy-controlling part of the government of the State, until, at least, it appears that the interposition of the Court is required in order to prevent an injustice.

Text of Sections of the Constitution and of the Statutes.

This is a repetition of provisions summarized above in Section 3 A of this report:—

The Constitution.

Article IX.

"Section 12. No county, city, township, school district, or other municipal corporation, shall be allowed to become indebted in any manner or for any purpose, to an amount,

including existing indebtedness, in the aggregate exceeding five percentum on the value of the taxable property therein, to be ascertained by the last assessment for State and county taxes, previous to the incurring of such indebtedness. Any county, city, school district, or other municipal corporation incurring any indebtedness as aforesaid, shall before, or at the time of doing so, provide for the collection of a direct annual tax sufficient to pay the interest on such debt as it falls due, and also to pay and discharge the principal thereof within twenty years from the time of contracting the same. . . ."

THE STATUTES.

(Cahill's Illinois Revised Statutes 1931.)

[Chapter 42.]

"Para. 341 (6). § 5f. *Enactment of annual appropriation ordinance:* The board of trustees of the district shall consider the budget estimates as submitted to it by the committee on finance and may revise, alter, increase, or decrease the items contained in the budget; *provided, however,* that in no event shall the total aggregate expenditures in the budget exceed the total means of financing the said budget.

The board of trustees shall, within the first thirty (30) days of each fiscal year, adopt the budget and shall finally pass an ordinance, to be termed the annual appropriation ordinance, together with such other ordinances as may be required in and by which appropriation ordinance the said board of trustees shall appropriate such sums of money as may be necessary to defray all necessary expenses and liabilities of said district to be by said board of trustees paid or incurred during and until the time of the adoption of the next annual appropriation ordinance under this section; provided, that the said board of trustees shall appropriate such sums of money as shall be necessary to pay the principal and interest on bonds for the current fiscal

year and the next succeeding year; *provided, further,* that said board shall not expend any money or incur any indebtedness or liability on behalf of said district in excess of the percentage and several amounts limited by law, and based on the limit prescribed in the constitution, when applied to the assessment of the current fiscal year. Said appropriation ordinance shall specify the several funds, organization units, purposes and objects for which such appropriations are made, and the amount appropriated for each fund, organization unit, object or purpose. The revenues of the district as estimated in the budget and as provided for by the tax-levy ordinance and other revenue and borrowing acts or ordinances, shall be and become applicable in the amounts and according to the funds specified in the budget for the purpose of meeting the expenditures authorized by the appropriation ordinance. The vote of said board of trustees upon said appropriation ordinance shall be taken by yeas and nays, and the same shall be entered in the proceedings of the said board of trustees.

Such appropriation ordinance may be amended at the next regular meeting of the board of trustees occurring not less than five days after the passage thereof, in like manner as other ordinances; and in case any items of appropriation contained therein are vetoed by the president of the board, with recommendations for alterations or changes therein, the adoption of such recommendations by a yea and nay vote shall be regarded as the equivalent of an amendment of such annual appropriation ordinance with like effect as if an amendatory ordinance had been duly passed.

Such appropriation ordinance shall not take effect until after it shall have been once published in a newspaper having general circulation in the district, and said board shall provide for and cause said appropriation bill to be published as aforesaid within ten days after final passage of such appropriation ordinance.

The clerk of the said board of trustees shall certify that such appropriation ordinance as published is a true, accurate and complete copy of the appropriation ordinance as passed and approved by the said board of trustees. The board of trustees shall also make public, by publication or otherwise, at this time, the tax rate necessary or estimated to be necessary to finance the budget as adopted.

After the adoption of such appropriation ordinance, the board of trustees shall not make any further or other appropriations prior to the adoption or passage of the next succeeding annual appropriation ordinance, and the said board shall have no power, either directly or indirectly, to make any contract or to do any act which shall add to the district expenditures or liabilities in any fiscal year, anything or sum over and above the amount provided for in the annual appropriation ordinance for that fiscal year, *provided, however,* the board of trustees shall have the power, anything in this Act to the contrary notwithstanding, if and when the voters have approved a bond ordinance for a particular purpose, which bond ordinance shall not have been passed at the time the annual appropriation ordinance was passed, to pass a supplemental appropriation ordinance (in compliance with the provisions of this Act as to publication and voting thereon by the board of trustees) making appropriations, for the particular purpose only as set forth in said bond ordinance, of the proceeds of the said bond ordinance or any part thereof required to be expended during the fiscal year; *and provided further, however,* that nothing herein contained shall prevent the board of trustees, by a concurring vote of two-thirds of all the trustees, (said votes to be taken by yeas and nays and entered in the proceedings of the said board of trustees) from making any expenditure or incurring any liability rendered necessary to meet emergencies such as epidemics, floods, fires, unforseen damages or other catastrophies, happening after the annual appropriation ordinance shall have been passed or adopted. Nor shall any-

thing herein contained be construed to deprive the board of trustees of the power to provide for and cause to be paid from the district funds any charge upon said district imposed by law without the action of said board of trustees."

"Para. 341 (7). § 5g. *When expenditures are prohibited:* No contract shall hereafter be made, or expense or liability incurred by the said board of trustees, or any member or committee thereof, or by any person or persons, for or in its behalf notwithstanding the expenditure may have been ordered by the said board of trustees, unless an appropriation therefor shall have been previously made by said board in manner aforesaid. No officer, head of a department, or commission shall, during a fiscal year, expend or contract to be expended any money or incur any liability, or enter into any contract which, by its terms, involves the expenditure of money for any of the purposes for which provision is made in the appropriation ordinance in excess of the amounts appropriated in said ordinance. Any contract, verbal or written, made in violation of this section shall be null and void as to the district, and no moneys belonging thereto shall be paid thereon; *provided, however,* that nothing herein contained shall prevent the making of contracts for the lawful purposes (5) of said district, the term of which contracts may be for periods of more than one year, but any contract so made shall be executory only for the amounts for which the said district is lawfully liable in succeeding fiscal years."

"Para. 343 (1). *Disposal of Industrial Waste.* § 7a. The Sanitary District, in addition to the other powers vested in it, is empowered:

"(a) To regulate and control the discharge of so-called factory or industrial wastes, either in solution or suspension, into the sewers or works of said sanitary district, whether said discharges are made directly into the works or sewers of said sanitary district or indirectly

through the sewer systems of a municipality or other area lying within the boundaries of said district;

"(b) To contract with the industry or industries producing wastes for the purpose of determining the amount of treatment which said industry or industries shall give the wastes at the point of origin, and also for the purpose of determining what payment said industry or industries shall make annually or otherwise for the treatment which may be given its wastes by the works of said sanitary district;

"(c) To require any occupant of any industrial premises inside or outside of the boundaries of any established municipality within the area of said sanitary district engaged in discharging factory or industrial wastes into any river, canal, ditch or other waterway within the boundaries of said sanitary district to construct new sewage disposal plants and to so change or re-build any outlet, drain or sewer as to discharge said factory or industrial waste or trade waste into the sewers of such municipality or into such intercepting sewers as may be established by said sanitary district under such regulations as said sanitary district may determine;

"(d) To make, promulgate and enforce such reasonable rules and regulations for the supervision, protection, management and use of any system of intercepting sewers and treatment works as it may deem expedient, and such regulations shall prescribe the manner in which connections to the main sewers or intercepting sewers shall be made and may prohibit discharge into said sewers of any liquid or solid waste deemed detrimental to the sewerage system or treatment works of said sanitary district."

"Para. 345. *Corporations under this Act may borrow money — Bonds — Limitation — Referendum — Exception — Ballot.* § 9. The corporation may borrow money for corporate purposes and may issue bonds therefor, but shall not become indebted in any manner, or for any purpose to an amount in the aggregate to exceed five (5) per centum of the valuation of taxable property therein, to be

ascertained by the last assessment for State and county taxes previous to incurring of such indebtedness. No ordinance providing for the issuance of bonds of any sanitary district organized under this Act shall be valid, unless it specifically states the purpose for which such bonds are to be issued and the funds derived from the sale of any such bonds shall be used solely for the purpose stated in such ordinance. Such bonds may be sold and delivered as and when the proceeds thereof shall be deemed necessary by the board of trustees. Bonds shall be of the form and tenor and shall be executed for and on behalf of such sanitary district by such of its officers as may be specified in the bond ordinance. The validity of every bond so executed shall remain unimpaired by the fact that one or more of the subscribing or attesting officers shall have ceased to be such officer or officers before the delivery of said bonds to the purchaser.

After December 31, 1928, no such sanitary district shall issue bonds for any purpose, except for the purpose of paying lawful claims against such sanitary district for damage to land or for damage to or destruction of other property, where such damage or destruction is caused or occasioned by such sanitary district, unless the proposition to issue such bonds shall have been first submitted to the legal voters of such sanitary district, and shall have been approved by a majority of those voting upon the proposition. *Provided,* the Sanitary District of Chicago may from time to time issue bonds, without submitting the issuance thereof to the voters of said district for approval, for an amount not to exceed in the aggregate twenty-seven million dollars ($27,000,000) (exclusive of any other bonded indebtedness of said district) for the completion, enlargement and/or construction (including the payment of existing contract liabilities and the acquisition of sewer easements) of the intercepting sewers, tunnels, conduits, sewage treatment plants, and pumping stations of said district, together with equipment and appurtenances necessary thereto, commonly

known and described as follows: Calumet Sewage Treatment Works, North Side Sewage Treatment Works, North Branch Pumping Station, West Side Sewage Treatment Works, West Side Intercepting Sewer, and Salt Creek Intercepting Sewer; for the acquisition of land for an additional site for said Calumet Sewage Treatment Works and for a site for a proposed new sewage treatment plant to be known as the 'Southwest Side Sewage Treatment Works'; for engineering expenses for designing such Southwest Side Sewage Treatment Works, the intercepting sewers connecting therewith, and a new sewage pumping station to be known as the 'Racine Avenue Pumping Station'; for the reconstruction and rehabilitation of the electrical terminal station of said district located at Thirty-first Street and Western Avenue, in the city of Chicago; and for the purpose of paying existing contract obligations arising and growing out of the construction by said district of its North Side Intercepting Sewer and its Ninety-fifth Street Pumping Station and sewers connecting therewith.

Also further provided the Sanitary District of Chicago from time to time may issue and sell bonds as authorized in and by certain ordinances of the board of trustees of said district, adopted January 16, 1931, for an amount not to exceed $11,000,000 for paying the cost of the construction and enlargement of the sewage treatment works and additions thereto, pumping stations, tunnels, conduits and intercepting sewers connecting therewith, together with equipment and appurtenances necessary thereto, commonly known and described as the West Side Sewage Treatment Works; for an amount not to exceed $20,300,000 for paying the cost of the construction and enlargement of the sewage treatment works and additions thereto, pumping stations, tunnels, conduits and intercepting sewers connecting therewith, together with equipment and appurtenances necessary thereto, commonly known and described as the Calumet Sewage Treatment Works; for an amount not to exceed $3,100,000 for paying the cost of acquiring the land for the site

and of the construction and enlargement of the sewage treatment works and additions thereto, pumping stations, tunnels, conduits and intercepting sewers connecting therewith, together with equipment and appurtenances necessary thereto, commonly known and described as the Southwest Side Sewage Treatment Works, and for an amount not to exceed $1,600,000 for paying the cost of the construction and enlargement of the sewage treatment works and additions thereto, pumping stations, tunnels, conduits and intercepting sewers connecting therewith, together with equipment and appurtenances necessary thereto, commonly known and described as the North Side Sewage Treatment Works. Said bonds may be issued without submitting propositions therefor to the voters of said district for approval and shall be in addition to any other bonded indebtedness which said district is authorized by law to incur; and all proceedings heretofore taken by the board of trustees of said district in adopting said ordinances on January 16, 1931, authorizing said several issues of bonds, publication of such ordinances and filing of certified copies thereof in the office of the county clerk of Cook County are hereby confirmed.

Whenever the corporate authorities of any such sanitary district desire to issue bonds for any of its corporate purposes, except as hereinabove provided, they shall by ordinance direct that the ordinance or ordinances for the issuance of such bonds be submitted to the legal voters of such sanitary district at any general election or at a special election to be held for such purpose. Such ordinance shall prescribe the form of the ballot, fix the date of the election, and direct the clerk of such sanitary district to publish a notice of the submission of the ordinance or ordinances, to issue such bonds once a week for three consecutive weeks prior to such election, in a secular newspaper of general circulation within the territorial limits of such sanitary district. The ballot to be used at any such election shall state the purpose for which it is proposed to

issue such bonds and the amount thereof, as set forth in each ordinance authorizing the issuance thereof, and shall be in substantially the following form:

Shall bonds for the purpose of (State purpose)	Yes	
in the sum of ..... be issued by the Sanitary District of	No	

It shall not be necessary to print in full on the ballot any such ordinance authorizing the issuance of bonds.

Any such election for the submission of a bond ordinance or ordinances shall be conducted by the election officials authorized by law to conduct elections for trustees for such sanitary district. Said election officials shall fix the polling places at which any such election is to be held and select the judges and clerks therefor. Any such election shall be conducted, the vote canvassed, and the result thereof declared in the same manner as is provided by law in the case of elections for trustees for such district; and the laws in force relating to the conduct of general elections shall govern any such election."

"Para. 349. *Taxes — Levy by trustees — Limitation — Bridges not to interfere with navigation — Mode of construction.* § 12. The board of trustees may levy and collect taxes for corporate purposes upon property within the territorial limits of such sanitary district, the aggregate amount of which in any one year exclusive of the amount levied for the payment of bonded indebtedness and the interest on bonded indebtedness shall not exceed one-third of one per centum of the value of the taxable property within the corporate limits as the same shall be assessed and equalized for the county taxes for the year in which the levy is made. Said board shall cause the amount

to be raised by taxation in each year, to be certified to the county clerk on or before the second Tuesday in August as provided in section one hundred and twenty-two of the general revenue law. All taxes so levied and certified shall be collected and enforced in the same manner and by the same officers as State and county taxes, and shall be paid over by the officer collecting the same to the treasurer of the sanitary district, in the manner and at the time provided by the general revenue law: *Provided,* that no part of the taxes hereby authorized shall be used by such drainage district for the construction of permanent, fixed, immovable bridges across any channel constructed under the provisions of this Act: *And provided further,* that all bridges built across such channel shall not necessarily interfere with or obstruct the navigation of such channel, when the same becomes a navigable stream, as provided in section 24 of this Act, but such bridges shall be so constructed that they can be raised, swung or moved out of the way of vessels, tugs, boats, or other water craft navigating such channel: *And provided further,* that nothing in this Act shall be so construed as to compel said district to maintain or operate said bridges, as movable bridges, for a period of nine years from and after the time when the water has been turned into said channel pursuant to law, unless the needs of general navigation on the Des Plaines and Illinois Rivers, when connected by said channel, sooner require it."

"Para. 350. *Taxation by special or general assessment —Manner of assessing and collecting taxes.* § 13. The board of trustees shall have power to defray the expenses of any improvement made by it in the execution of the powers hereby granted to such incorporation, by special assessment, or by general taxation, or partly by special assessment and partly by general taxation as they shall by ordinance prescribe. It shall constitute no objection to any special assessment that the improvement for which the same is levied is partly outside the limits of such incor-

poration, but no special assessment shall be made upon property situated outside of such sanitary district, and in no case shall any property be assessed more than it will be benefited by the improvement for which the assessment is levied. The proceedings for making, levying, collecting and enforcing of any special assessment levied hereunder shall be the same as nearly as may be as is prescribed by article nine of an Act entitled 'An Act to provide for the incorporation of cities and villages,' approved April 10, 1872. Whenever in said act the words "city council" are used, the same shall apply to the board of trustees constituted by this Act, and the words applying to the city or its officers in that article shall be held to apply to the corporation hereby created and to its officers."

[Chapter 120.]

"Para. 362. *Rate — Extension — Levy — Reduction — Minimum Rate — Distribution of Reduction.* § 2. The county clerk in each county shall ascertain the rates per cent required to be extended upon the assessed valuation of the taxable property in the respective towns, townships, districts, incorporated cities and villages in his county, having a population of over 200,000, as equalized by the State Tax Commission for the current year, to produce the several amounts certified for extension by the taxing authorities in said county (as the same shall have been reduced as hereinbefore provided in all cases where the original amounts exceed the amount authorized by law); *provided, however,* that if the aggregate of all taxes (exclusive of State taxes, township taxes, village taxes, levy taxes, public tuberculosis sanitarium taxes, pension fund taxes, library taxes, school building taxes, high school taxes, district school taxes, road and bridge taxes, judgment taxes, working cash fund taxes, and taxes levied for the payment of the principal of and the interest on bonded indebtedness of cities and school districts and for the payment of the principal of and the interest on park bonds

hereafter issued, and exclusive of taxes levied pursuant to the mandate or judgment of any court of record on any bonded indebtedness), certified to be extended against any property in any part of any taxing district or municipality, shall exceed 1% of the assessed valuation thereof upon which the taxes are required to be extended, the rate per cent of the tax levy of such taxing district or municipality shall be reduced as follows: The county clerk shall reduce the rate per cent of the tax levy of such taxing district or municipality in the same proportion in which it would be necessary to reduce the highest aggregate per cent of all the tax levies (exclusive of State taxes, township taxes, village taxes, levee taxes, public tuberculosis sanitarium taxes, library taxes, pension fund taxes, school building taxes, high school taxes, district school taxes, road and bridge taxes, judgment taxes, working cash fund taxes, and taxes levied for the payment of the principal of and the interest on bonded indebtedness of cities and school districts and for the payment of the principal of and interest on park bonds hereafter issued, and exclusive of taxes levied pursuant to the mandate or judgment of any court of record on any bonded indebtedness), certified for extension upon any of the taxable property in said taxing district or municipality, to bring the same down to one per cent of the assessed value of said taxable property upon which said taxes are required by law to be extended: *Provided, further,* that in reducing the tax levies hereunder the rate per cent of the tax levy for county purposes for the year 1929 shall not be reduced below a rate of thirty-one (31) cents on each one hundred dollars valuation, and for the year 1930 and each even numbered year thereafter shall not be reduced below a rate of thirty-two (32) cents on each one hundred dollars valuation and for the year 1931 and each odd numbered year thereafter shall not be reduced below a rate of twenty-eight (28) cents on each one hundred dollars valuation, exclusive, respectively, of taxes for the payment of indebtedness existing at the adop-

tion of the present State constitution, and taxes for the payment of interest on and principal of bonded indebtedness heretofore duly authorized for the construction of State aid roads in the county, and taxes for the payment of interest on and principal of bonded indebtedness duly authorized without a vote of the people of the county, and taxes for working cash fund purposes, and taxes authorized as additional by vote of the people of the county, and county highway taxes as authorized by section 14 of an Act entitled, 'An Act in relation to State highways,' approved June 24, 1921, in force July 1, 1921, and the rate per cent of the tax levy for city or village purposes, (exclusive of library, public tuberculosis sanitarium, pension fund, school, park, judgment tax, and working cash fund purposes, and exclusive of the taxes levied for the payment of the principal of and interest on bonded indebtedness) in cities and villages shall not be reduced below a rate of one dollar and thirty-three cents ($1.33) for the year 1929, one dollar and thirty-seven cents ($1.37) for each of the years 1930 and 1931, one dollar and thirty-five cents ($1.35) for the year 1932, one dollar and thirty-two cents ($1.32) for the year 1933, and one dollar and twenty-nine cents ($1.29) for each year thereafter, on each one hundred dollars assessed value, and the rate per cent of the school tax levy for educational purposes, for free text book purposes, for school playground purposes and for public school teachers' pension and retirement fund purposes, respectively, in any district, city or village, shall not be reduced below the maximum rate allowed by law, and the rate per cent of the tax levy for park purposes in districts organized and existing under an Act entitled, 'An Act to provide for the creation of pleasure driveway and park districts,' approved June 19, 1893, in force July 1, 1893, shall not be reduced below a rate of twenty cents on each one hundred dollars assessed value (exclusive of levies to pay the principal and interest on bonded indebtedness and judgments), and the rate per

cent of the tax levy for park purposes in districts, created, organized and existing under and by virtue of an Act entitled, 'An Act to amend the charter of the city of Chicago to create a board of park commissioners, and authorize a tax in the town of West Chicago, and for other purposes,' approved and in force February 27, 1869, and all Acts amendatory thereof, shall not be reduced below a rate of twenty-seven and one-half cents in the year 1929 and thirty-three cents in the years 1930 and each year thereafter on each one hundred dollars assessed value (exclusive of levies to pay the principal of and interest on bonded indebtedness and judgments, and levies for employees' annuity and benefit funds, policemen's pension funds and policemen's annuity and benefit funds), and the rate per cent of the tax levy for park purposes in districts organized and existing under an Act entitled, 'An Act to provide for the organization of park districts, and the transfer of submerged lands to those bordering on navigable bodies of water,' approved June 24, 1895, in force July 1, 1895, shall not be reduced below a rate of fifteen cents on each one hundred dollars assessed value (exclusive of levies to pay the principal of and interest on bonded indebtedness and judgments), *provided* that whenever the voters of any park district shall have heretofore or hereafter approved, in accordance with the provisions of section 22 of said Act, an increase in the authorized tax levy to not more than two mills on each dollar of taxable property in said district, the rate per cent of the tax levy for park purposes in such district, shall not be reduced below the rate per cent on each one hundred dollars assessed value levied by such park district, but not in excess of twenty cents on each one hundred dollars assessed value (exclusive of levies to pay the principal of and interest on bonded indebtedness and judgments), and the rate per cent of the tax levy for park purposes in districts comprising any three towns organized and existing under and in pursuance of any Act or Acts of the General Assembly of this State, which has or have been

submitted to the legal voters of such three towns and by them respectively adopted, for the purpose of locating, establishing, enclosing, improving or maintaining any public park, boulevard, driveway, highway or other public work or improvement, shall not be reduced below a rate of twenty cents on each one hundred dollars assessed value for the year 1929 and twenty-three cents on each one hundred dollars assessed value for the year 1930 and each year thereafter (exclusive of levies for employees' annuity and benefit funds, policemen's pension funds, policemen's annuity and benefit funds, levies to pay the principal of and interest on bonded indebtedness and judgments and levies for the maintenance and care of aquariums and museums in public parks), and the rate per cent of the tax levy for park purposes in townships of this State, levied under an Act entitled, 'An Act authorizing townships to acquire and maintain lands for park purposes,' approved and in force June 23, 1915, as subsequently amended, shall not be reduced below a rate of five cents on each one hundred dollars assessed value, and the rate per cent of the tax levy for sanitary district purposes in sanitary districts organized and existing under an Act entitled, 'An Act to create sanitary districts and to remove obstructions in the Des Plaines and Illinois Rivers,' approved May 29, 1889, and in force July 1, 1889, shall not be reduced below a rate of fifteen cents on each one hundred dollars assessed value (exclusive of levies to pay the principal of and interest on bonded indebtedness, and exclusive of levies for employees' annuity and benefit funds or pension funds), and the rate per cent of tax levy for forest preserve district purposes, in forest preserve districts of two hundred thousand population or more, exclusive of levies for zoological park purposes and exclusive of levies necessary to pay the principal and interest of bonded indebtedness, and also exclusive of levies for employees' annuity and benefit funds or pension funds, shall not be reduced below a rate of one and one-half cents on the one hundred dollars valuation, and

the rate per cent of the tax levy for working cash fund purposes levied under authority of 'An Act to provide for the creation, setting apart, maintenance and administration of a working cash fund in counties having a population of five hundred thousand or more inhabitants,' enacted by the Fifty-sixth General Assembly in special session, in force July 1, 1930, levied under authority of 'An Act to provide for the creation, setting apart, maintenance and administration of a working cash fund in cities having a population of one hundred and fifty thousand or more inhabitants,' enacted by the Fifty-sixth General Assembly in special session, in force July 1, 1930, and levied under authority of section 134½ of 'An Act to establish and maintain a system of free schools,' approved and in force June 12, 1909, as amended, which said section 134½ was added thereto by the Fifty-sixth General Assembly in special session, shall not be reduced below the maximum rate allowed by law, and the rate per cent of the tax levy for judgment tax purposes under authority of 'An Act authorizing cities having a population of one hundred and fifty thousand or more inhabitants to levy a tax for the payment of judgments,' enacted by the Fifty-sixth General Assembly in special session, shall not be reduced below the maximum rate allowed by law, but the other taxes which are subject to reduction under this section shall be subject only to such reductions, respectively, as would be made therein under this section if this proviso were not inserted herein: *And, provided, further,* that in reducing tax levies hereunder, no levies for school purposes shall be diminished. The term 'park purposes' as used in this section shall be deemed to include all purposes of locating, establishing, improving and maintaining all public parks, boulevards, driveways, highways, and other public works and improvements within the control of boards of park commissioners.

The rate per cent of the tax levy of every county, city, village, town, township, park district, sanitary district, road district, and other public authorities, (except the

State), having a population of more than 200,000, shall be ascertained and determined (and reduced when necessary as above provided) in the manner hereinbefore specified, and shall then be extended by the county clerk upon the assessed value of the property subject thereto (being the full value thereof) as equalized according to law. In reducing the rate per cent of any tax levy as hereinbefore provided, the rates per cent of all tax levies certified to the county clerk for extension as originally ascertained and determined under section 1 of this Act shall be used in ascertaining the aggregate of all taxes certified to be extended without regard to any reduction made therein under this section: *Provided,* that no reduction of any tax levy made hereunder shall diminish any amount appropriated by corporate or taxing authorities for the payment of the principal or interest on bonded debt, or levied pursuant to the mandate or judgment of any court of record. And to that end, every such taxing body shall certify to the county clerk, with its tax levy, the amount thereof required for any such purpose.

In case of a reduction hereunder, any taxing body whose levy is affected thereby and whose appropriations are required by law to be itemized, may, after the same have been ascertained, distribute the amount of such reduction among the items of its appropriations, with the exceptions aforesaid, as it may elect. If no such election is made within three months after the extension of such tax, all such items, except as above specified, shall be deemed to be reduced pro rata."

3 B: The Financial Measures on the Part of the State of Illinois Which are Reasonable and Necessary in Order to Carry Out the Decree of This Court.

In order to carry out this decree with tolerable conditions for the health of those living in the Sanitary District, it is both reasonable and necessary that the State of Illinois, already adjudged responsible for this continuing wrong to

the complainants, should meet that responsibility without delay by providing at once the money necessary for the works which will remove or prevent the injurious conditions. The occurrences since the decree was entered show that specific measures are necessary.

The Sanitary District has represented to the Reconstruction Finance Corporation what, otherwise, those conditions will be, namely:—

> "should the District's construction program not be completed at that time [December 31, 1938], pestilence and disease might result, which, because of Chicago's pivotal position in the nation, might spread and grow into a nationwide calamity . . . . The construction program is absolutely essential and necessary to the preservation and safeguarding of the health and lives of the people of the second largest metropolitan area of the United States. Should the Sanitary District of Chicago, through lack of financial ability or otherwise, fail to comply with that decree, it would subject the people of Chicago and adjacent communities to all the evils, many times magnified, which afflicted them prior to the opening of the Sanitary Canal. It would mean renewal of the contamination and poisoning of their source of drinking water, with accompanying increase of illness and probable deaths of hundreds of innocent victims."

An effective measure would be to enlarge the decree by adding to it a paragraph providing that the State of Illinois be enjoined to appropriate through its General Assembly, before July 1, 1933, the sum of thirty-five million dollars to be expended before the end of the first fiscal quarter after the adjournment of the next regular session or in any event before October 1, 1934 and the same amount per year for each year ending on September thirtieth thereafter for the designing and the securing of authorization from the War Department and for construction of Controlling Works for the purpose of preventing reversals of

the Chicago River at times of storm and the introduction of storm flow into Lake Michigan and for sites for, and for the engineering expenses of designing, and for the construction, enlargement, alteration and completion of the intercepting sewer tunnels, conduits, sewage treatment plants and pumping stations commonly known as the Calumet Treatment Works, North Side Treatment Works, West Side Treatment Works and Southwest Side Treatment Works and all things appertaining thereto within the Sanitary District of Chicago, until all the same shall have been fully completed; and to incur indebtedness therefor and for the purposes aforesaid and no other to issue and to sell bonds of the State of Illinois for the amounts so appropriated and on such terms of payment and maturity and at such rates of interest as the General Assembly shall determine and without the laws authorizing the same being submitted to the people of Illinois and the said laws shall be valid and the bonds so issued if in other respects conforming to the Constitution and laws of the State of Illinois shall be valid obligations of the State of Illinois notwithstanding the fact that said laws have not been submitted to the people of Illinois either theretofore or thereafter and any sums expended for said works by the Sanitary District of Chicago, hereafter, from its own funds in any year ending September thirtieth shall reduce by so much the amount of the appropriation for said year which the State of Illinois is hereby required to expend.

The reasons why this measure is both reasonable and necessary are set out in the main, hereinbefore in Sections 1 B and 3 A.

The necessity for the State to provide the money is evident from the financial condition of the Sanitary District.

If the General Assembly decides to pay for the construction of these works from annual tax levies and not from proceeds of bonds, this may be done under the terms of the addition to the decree, as fast as taxes can be levied and collected. Any bonds issued may be made payable or

callable as fast as collections are made. If tax collections are brought in fast enough, bonds not sold, need not be offered. If tax anticipation warrants are in the judgment of the General Assembly, a better method to obtain this money, this way will be open.

The State of Illinois contends that the Supreme Court of the United States has not the power to issue an injunction in the tenor outlined and that, if it had, it should not exercise it.

If the Court decides otherwise and such an injunction is issued the dignity and the history of the State of Illinois assure its prompt compliance.

The Sanitary District opposes any order that the State of Illinois provide any of the necessary money. The District claims that the Reconstruction Finance Corporation and not the State should provide the money to the extent of $36,450,000. This is for the Calumet, West Side, and North Side Projects. The District claims that no more money should be provided now for the Southwest Side Treatment Works or for the Controlling Works. The District represents that if the necessary intercepting sewers parallel to the main Chicago River and to the North Branch of it are built, it is ready to accept a reduction to 5000 c. f. s., without Controlling Works and that these works, if found necessary can be completed before December 31, 1938 if begun by January 1, 1937.

The defendants when requested on February 15, 1933 felt unable to assert and therefore declined to assert and do not assert and cannot assert a confident hope that ever, the Sanitary District will be able financially to resume construction in a large way on this project.

Outside sources without the State should not be drawn upon, to pay what is tantamount to a judgment debt of the State of Illinois and its instrumentality the Sanitary District of Chicago.

The defendants concede that there is no way of getting money for this project within the year 1934, without a bond issue by the State of Illinois.

No way has come to light, whereby this decree can be performed under tolerable conditions, unless the State of Illinois meets its responsibility and provides the money.

The measure dispensing with the popular vote is chosen because (a) in the absence of a liability of the State of Illinois for expenditure, adjudged by the Supreme Court of the United States to be the duty of the State, the General Assembly is powerless to make a debt-incurring contract for the construction of these works, without a popular vote, (b) the making of contracts should not be delayed until after November 1934, the first time at which a vote can be obtained, (c) there is no reason to anticipate that, if the opportunity were possible, the people of Illinois would not vote to have the State perform its adjudged duty, and (d) the popular vote is futile in the face of the duty of the State.

The Sanitary District soon after the decision of this Court, January 14, 1929 (278 U. S. 367), issued a pamphlet in a campaign to get authority from the Legislature to issue bonds for $45,000,000 without referendum. In this pamphlet, the District said: "The purpose of a referendum vote on bond issues is to submit to the people the opportunity to say whether the public improvement, the expense of which the particular bond issue is intended to defray, is from the people's standpoint advisable. *The public works required* to be installed *to meet the decree of the Supreme Court* or the directions of the Secretary of War, *must be constructed and put in operation.*"

On May 15, 1930, the Sanitary District in its resolution, quoted hereinbefore in Section 3 A, said: "Under the mandatory requirements of the Supreme Court of the United States, such a referendum would answer no useful purpose inasmuch as now the people have no discretion whatever in the premises and such sewage treatment works must be constructed."

A decree of this Court enjoining the State to make the appropriations to contract for construction and to issue

the bonds without popular vote does not invade the discretion of the General Assembly. This Assembly, chosen and sworn to support the Constitution of the United States, never possessed a discretion to defeat or to obstruct the performance of a decree of the Supreme Court of the United States entered in the exercise of its jurisdiction conferred by that Constitution, over controversies between States, however sovereign they were before entering that compact, by which, by so much, they curtailed their own sovereignty. The decree takes away no discretion which was in existence before its entry. A State, in howsoever august a branch of its government, has no discretion to escape the performance of a duty imposed upon it by the Constitution of the United States.

In reporting what measures are in fact reasonable and necessary, I am bound to assume the law to be settled as to the State of Illinois that "if its constitution stands in the way of prompt action it must amend it or yield to an authority that is paramount to the State" (281 U. S. 179, 197). The implication is inescapable that the authority meant is the Supreme Court of the United States, engaged in the necessary performance of its duty to give effect to the Constitution of the United States.

The validation clause is chosen because it is necessary as a measure to remove doubt from the minds of investors.

The time limit on each appropriation is chosen because of the clause in Article IV, section 18, hereinbefore quoted, of the Constitution of Illinois, that appropriations shall be for expenses of the government "until the expiration of the first fiscal quarter after the adjournment of the next regular session."

The time for making the first appropriation is chosen as before July 1, 1933 because of the prospect that the General Assembly will adjourn in June, 1933. Its next regular session will convene in January, 1935.

The annual amount of the appropriation is at a rate which would yield the whole amount of future cost as estimated by the Sanitary District, before October 1, 1938.

The deduction of actual expenditures of the Sanitary District on the same works will give a means of relief to the State if a way can be found for the Sanitary District to obtain its own money either by taxation or by borrowing. It is unnecessary to take part in this internal adjustment between the State and the Sanitary District. The Supreme Court of Illinois has indicated that the General Assembly has power to place the final incidence of this burden on the Sanitary District (*City of Chicago* v. *Manhattan Cement Co.*, 178 Illinois 372, 382). The valuation for 1930 tax purposes, of the property in the District is between fifty-three and fifty-four percent of the valuation of the property within the State.

The language in the case cited tends to indicate that inasmuch as this project is one for which as between the Sanitary District and the State, the District ought to pay, the General Assembly in its discretion may levy the taxes for the payment of the principal and interest of the bonds directly upon the taxable property within the Sanitary District to the exclusion of property elsewhere. If this may be done, these bonds will take nothing from taxes on property outside the District.

In fixing the amount at $35,000,000 in the first year account is taken that (1) there is past due to contractors already under way on contracts $1,115,000 (Report for January 1, 1933, p. 10), (2) contracts already let are for $8,810,500 (same Report, p. 12), (3) the latest estimate of the Sanitary District for controlling works is $3,200,000 (Return filed November 7, 1932, p. 11), which should all be contracted for before January 1, 1934, (4) the Sanitary District has represented to the Reconstruction Finance Corporation that plans are completed ready to advertise for about $2,500,000 of additional construction and that (5) other contracts can be let within sixty days from the date of assurance that funds will be available, and (6) about $27,657,000 will be required to place under construction and complete contracts originally planned to be let up to January 1, 1934, (7) the request to the Reconstruction

Finance Corporation was for $36,450,000 at once, (8) nothing was included in this for the Southwest Side Treatment Works or for the Controlling Works, (9) the Sanitary District represented to me on February 16, 1933 that, if funds are made available, it will be able to let contracts for new work totalling approximately $19,538,000, within nine months thereafter, for West Side intercepting sewers, Calumet intercepting sewers, Calumet Treatment Works, West Side Treatment Works, in addition to the unperformed contracts for about $8,800,000 already let and (10) sufficient appropriation is necessary as a basis for valid contracts even if dilatory performance does not ripen them into obligations to pay at once, the contract price, within the period covered by the appropriation.

These figures indicate that contracts should be made before January 1, 1934 for at least $35,000,000. This sum is fixed as the smallest that is necessary. In the two years and a half from July 1, 1933 to December 31, 1935, there is required the entire sum necessary to complete the Controlling Works, the Calumet Project, the North Side Project, the West Side Project now estimated by the Sanitary District to cost in the aggregate for future work $73,436,000 (Return filed November 7, 1932, p. 55). This includes nothing for progress on the Southwest Side Treatment Works now estimated by the Sanitary District to complete at $64,104,000 and for miscellaneous plants and sewers, so estimated at $8,000,000.

The financial position of the State of Illinois warrants these measures. At the last assessment valuation, that for 1930, the valuations for the whole State were:—

Real Estate	$6,149,215,816
Personal	1,309,693,942
Railroads Corp., etc.	790,519,403
	$8,249,429,161

At the 37% rate systematically employed for 1930, this indicates in the estimation of the valuers, a real estate full value of over $16,600,000,000.

An official publication entitled "The Blue Book of the State of Illinois, 1931-1932" edited by the Secretary of State of Illinois describes the resources of the State thus: "The State of Illinois takes high rank among the commonwealths of the nation in population, in wealth, in agriculture, in manufacturing industries, in commerce and in mining. Only New York and Pennsylvania exceed Illinois in population, which on April 1, 1930 was 7,630,654. This was an increase of 1,145,374 over the federal census of 1920. Chicago, the second largest city in the United States and the fourth largest in the world, has a population of 3,376,438, an increase of 674,733 in ten years. The metropolitan area of Chicago has a total population of 4,675,877. Illinois ranks third in wealth with total property valued at $24,356,000,000. The state's wealth is one-fourth as large as the total wealth of Great Britain, one-third as great as that of France; it almost equals that of Italy and Spain and exceeds most of the other countries of Europe. It is greater by several million dollars than the total wealth of the Dominion of Canada. The best balanced state in the Union in its production of manufactured goods and farm products, Illinois holds third place in manufacturing and fourth in agriculture. With farm crops valued in 1929 at $460,465,000, Illinois is exceeded in farm production only by Texas, Iowa and California. The value of livestock on Illinois farms January 1, 1931, was $221,994,000.

"Mines and Factories.

"The value of manufactured products of the State in 1929 amounted to $6,232,438,498, an increase in two years of $846,435,263, and giving Illinois third place among the States in the value of manufactured products. Total wages paid in the manufacturing industries of the State exceed $1,000,000,000 annually. Illinois ranks seventh in mineral production with an average yearly production of nearly one-quarter billion dollars. The State is the second largest

producer of fluorspar, tripoli and sulphuric acid from copper and zinc smelters, and is third among the States in the production of silica sand, sand and gravel, bituminous coal, Portland cement, pig iron and mineral paints and pigments. It holds fourth place in clay products, and fifth place in the production of fuller's earth. The principal mineral products of the State in the order of their value are coal and coke, clay and clay products, cement, petroleum and natural gas, gasoline, sand and gravel, stone, paints and pigments, fluorspar and lime.

"INDUSTRIAL LEADERSHIP.

"In the front rank of industrial States, Illinois produces 8 per cent of the electricity of the United States, 10 per cent of the manufactured gas, has 9 per cent of the telephones and a greater railroad mileage than any State except Texas. Illinois leads the world in the production of farm machinery and the manufacture of stoves. The largest lumber yard in the world is located in Chicago. Sixty-five per cent of the pianos manufactured in the United States are produced in Illinois. The largest glass-sand deposits in the world are located near Ottawa and the wall paper trade is centered in Joliet where more than 272,000 miles of wall paper are produced yearly. The greatest corn canning center in the world is at Hoopeston where more than 50,000,000 cans and bottles of food products are packed and canned annually."

The State, as of January 1, 1933, had a gross and net debt of $236,261,500, namely:—

Bonded Debt	$209,701,500
Emergency Relief Notes	18,750,000
Tax Anticipation Notes in Motor Fuel Tax Fund	7,510,000
Tax Anticipation Notes in Agricultural Premium Fund	300,000
	$236,261,500

The bonds of the State of Illinois have a high standing in the opinion of competent bankers. They have a ready market at an income basis ranging not to exceed a quarter

per cent below those of the Sanitary District when those of the District were in good credit. The District bonds sold, in the five years 1927 to 1931, to yield from a low of $4.072 plus, in April, 1926, to a high of $4.792 plus, in August, 1929, with the last sale of $4.712 plus in August, 1931. These bankers rate the bonds of the State of Illinois as easily triple A. The State readily marketed bonds to the extent of $20,000,000 in January, 1933.

These were sold to a syndicate at 100.4599. The financial condition and repute of the State have not been lowered since this sale. Bonds of the State have been selling to yield from 3.8% to 4%. Bonds of very few States are rated any higher than those of Illinois.

On February 28, 1933, the Governor of Illinois testified that unless conditions rapidly and marvelously change for the better, it will be impossible for the State to find a market during each of the next four years for $35,000,000 of bonds. This opinion appears unduly gloomy. It is at variance with the very recent experience of the State. It is contrary to the opinion of those presented by the defendants as competent investment bankers and who appeared to be such.

The State has no other general bond issue authorized or in contemplation.

The principal of the $35,000,000 need not affect the tax rate for some years to come, if the General Assembly decides against early maturities.

The State Treasurer of Illinois in his printed monthly report for January 1, 1933, gave his cash account as follows:—

Cash and monies in State Depositories—	
Inactive	$12,361,499.10
Active (Reserve for outstanding)	27,056,455.84
Cash in Vault	67,653.20
Coupons	116,156.54
Federal funds	109,517.02
Tax Anticipation Notes	7,810,000.00
	$47,521,281.70

The evidence does not give the reconciliation of these figures with the next to come. It is unnecessary.

On instructions of the Governor of the State, the Director in the Department of Finance, appointed January 26, 1933, has made a survey of the cash resources of the State as of December 31, 1932. This was submitted to the Governor on February 18, 1933. It was furnished to me on February 27, 1933.

December 31, 1932, there was cash on hand.....		$14,738,000
Road and Motor Fuel Fund should be....	$17,936,000	
Waterway Bond Fund should be	6,000	
All other Funds should be.....	4,952,000	
General Revenue Fund deficit		4,450,000
University of Illinois Fund deficit		290,000
Soldiers' Compensation Bond Interest and Retirement Fund deficit.....		3,416,000
	$22,894,000	$22,894,000

These deficits have been met by the purchase of tax anticipation warrants, with the moneys of the above funds. In consequence, when the taxes come in, they must be used to that extent to redeem the warrants from the funds. The State has not sold tax anticipation warrants except to itself. The warrants sold to itself for these funds amount to $7,810,000. These are:—

General fund tax anticipation warrants.....	$3,600,000
University of Illinois tax anticipation warrants.....	350,000
Waterway Bond Fund tax anticipation warrants.....	260,000
Soldiers' Compensation, etc., tax anticipation warrants	3,600,000
	$7,810,000

The State tax levies not collected on December 31, 1932, were:—

From Cook County for	1929.....	$4,932,000
	1930.....	9,154,000
	1931.....	15,056,000
	1932.....	19,305,000
From other Counties for	1929.....	0
	1930.....	0
	1931.....	1,999,000
	1932.....	15,914,000
Due to the State before or in 1933.....		$66,360,000

This sum belongs to—

General Fund	$26,345,000
School Fund	21,682,000
University of Illinois Fund	5,007,000
Waterway Bond Fund	2,972,000
Soldiers' Compensation, etc., Fund	8,852,000
Blind Relief Fund	1,502,000
	$66,360,000

Against some of these, it is not lawful to sell tax anticipation warrants. Deducting these and also warrants already sold, there remain available for sale from:—

General Fund	$16,159,000
University of Illinois Fund	3,407,000
Waterway Bond Fund	1,969,000
Soldiers' Compensation, etc., Fund	3,039,000
	$24,574,000

It does not appear that the State will find it necessary in 1933 to sell any tax anticipation warrants except to its own funds.

From the resources in taxes already levied and unpaid	$66,360,000
should be deducted the warrants already sold, as above set out, to particular funds	7,810,000
Leaving net uncollected levies	$58,550,000

It is not expected that this all will come in during 1933. The Director has estimated that receipts from these property tax levies will be in 1933:—

General Fund	$8,060,000
School Fund	6,544,000
University of Illinois Fund	1,442,000
Waterway Bond Fund	910,000
Soldiers' Compensation, etc., Fund	2,612,000
Blind Relief Fund	432,000
	$20,000,000

This estimate assumes that forty percent of the 1931 levy from Cook County and nothing from the 1932 levy from Cook County and eighty-five percent of the 1932 levy from all other counties, will come in, during 1933.

It is noteworthy that of the unpaid levies to December 31, 1932, in amount $66,360,000, the part due from Cook County is $48,447,000. Of the $17,913,000 from other counties, only $1,999,000 is overdue.

These tax delinquencies are alone what necessitates the inter-fund transfers of money which the State has made.

The Cook County delinquencies and sluggish extensions appear to be the only thing abnormal in Illinois State finances.

The Court is aware of the present evil times. Illinois is not shown to have more of them than the Complainants or than some other States.

The Director estimates that the cash receipts in 1933, without borrowing, will be:

General Tax levy as above	$20,000,000
Sundry general fund sources	18,135,000
Road and Motor Fuel Tax Funds—	
Motor Fuel Tax	18,000,000
Motor Fuel Tax Allotments to Counties	8,100,000
Motor license fees	18,000,000
United States aid	9,000,000
Miscellaneous	250,000
Miscellaneous Funds	2,130,000
	$93,615,000

The Director estimates that the cash disbursements in 1933, will be:

From General Fund—		
Salaries and Wages	$13,800,000	
Operating Expenses	13,200,000	
Improvements	750,000	
General Assembly	875,000	
University of Illinois	2,625,000	$31,250,000

From University of Illinois Fund		1,575,000
From School Fund Distribution to Counties		6,544,000
From Waterway Bond Fund		1,260,000
From Soldiers' Compensation, etc., Fund		4,222,650
From Blind Relief Fund		432,000
From Road and Motor Fuel Tax Funds—		
Salaries and Wages	$5,304,000	
Operating	2,502,000	
Improvements	29,745,000	
Distribution to Counties	8,100,000	
Finance Department	1,500,000	
Debt Service	8,364,053	55,515,053
From Miscellaneous Funds		2,947,200
From Emergency Relief Funds Debt Service		900,000
		$104,645,903
Deduct estimated receipts in cash		93,615,000
Leaves cash deficit		$11,030,903
If this deficit is met from above cash in the treasury		14,738,000
It will leave in the treasury December 31, 1933		3,707,000

If the cost of construction of the Controlling Works and of the Sewage Treatment Works, were to be met from the annual levies of the next four years, it would present the question whether the expenditures for other purposes must be cut or whether the levies must be increased or whether the State must take effective steps to overcome sluggish tax collecting in Cook County. It might then be necessary to weigh Road Improvements $29,745,000 against performance of duty by Sanitary Improvements $35,000,000. On the other hand, if this cost is to be met over twenty or more years in the payment of bonds issued now, from time to time, for the money borrowed for this purpose, the current expected disbursements and receipts are less important.

As to these, the showing is not such as to create apprehension of an impending default on bond maturities or on bond interest.

The prospect now is that bonds of the State for $35,000,000 a year supported by the requisite tax levy before issue, can be marketed in the normal manner and without

difficulty. Due consideration has been given to the effect of increased issues, on the market.

The need of borrowings for other purposes is not to be overlooked. This cannot be brought into confinement without a political survey. No necessity for these borrowings appears to be greater than the one before the Court.

If it were thought advisable by the State to raise the money for these works, in later years, directly by taxation, the powers of the General Assembly are broad.

The Constitution of Illinois does not fix a limit on the amount of the general property tax, which the General Assembly may levy.

The levy for 1932 on each one hundred dollars of assessed valuation was for:—

General Fund	21	cents
School Fund	16	"
University of Illinois Fund	3½	"
Waterway Bond Fund	2⅓	"
Soldiers' Compensation, etc., Fund	6⅓	"
Blind Relief Fund	1	"
	50 1/6	"

For the fiscal year ending June 30, 1932, exclusive of borrowings, the revenues actually received in money, notwithstanding the large tax delinquencies, were approximately:—

	%	
Motor Fuel Tax	31	$30,462,000
Motor Vehicle and Chauffeurs' Licenses	17	17,124,000
Federal Aid	10	9,545,000
General Property Tax	18	17,782,000
Inheritance Tax	6	6,356,000
Insurance Premium Taxes	6	6,044,000
Corporation Franchise Tax	3	3,547,000
Illinois Central Charter Tax	2	1,866,000
All other Sources	7	5,788,000
	100	$98,514,000

These went into the funds as follows:

Motor Fuel Tax Fund	$30,462,000
Road Fund from licenses and Federal aid	26,268,000
General Revenue Fund	27,643,000
School Fund	5,861,000
Soldiers' Compensation, etc., Fund	2,521,000
University of Illinois Fund	1,529,000
All other Funds	4,230,000
	$98,514,000

The Motor Fuel Tax is three cents a gallon. After cost of administration, one-third is apportioned to the counties and two-thirds to the State.

The counties may use their portions to retire certain road bonds and to construct certain roads. The State may use its portion in a similar manner.

The State's portion, the General Assembly may turn to other uses in subsequent years.

The Senate of Illinois has passed a three-cent sales tax. The action of the House remains to be taken. The project is to make this available for Unemployment Relief and for School Funds.

Whether the $35,000,000 annually for these Works shall be raised annually by taxation in place of borrowings, is for the General Assembly to determine. It is not to be anticipated that the General Assembly will wish to cover so large an amount in so short a time, when it can be spread over a longer period.

I find that the measures which are reasonable and necessary are the enlargement of the decree in the way set out in the third paragraph under section 3 B of this report.

POWERS OF THE COURT.

The defendants concede and assert the ample power of the Court to enforce by injunction the installation of the sewage treatment works (Defendants' Brief filed March 12, 1930 on Exceptions to Re-reference Report, p. 139).

The Controlling Works if authorized by the War Department would come within the same power.

The power to enforce the installations necessarily includes the power to enforce provision for paying for them.

The point of question is the power of the Court (1) to order the State or the District to tax or to issue bonds necessitating a tax levy or (2) to appoint its own commissioner with power to construct the Works and to issue bonds of the defendants and to tax for payment for the Works or of the bonds issued to provide the money.

When the Court is exercising the jurisdiction which Article III, section 2 confers over controversies between two or more States, the most complete definition of the extent of its power which this Court has given is in *Virginia* v. *West Virginia,* 246 U. S. 565, 591-605.

Theretofore it had been held that:—

The Supreme Court on original application will not issue a writ of mandamus to the governor of a State to compel him to render the aidor of the escape of a fugitive slave, as provided by Act of Congress because (Taney, C. J.) although but a ministerial act, the words of Congress were not mandatory but declaratory of a moral duty with no compulsive or punitive provisions "and we think it clear, that the Federal Government, under the Constitution, has no power to impose on a State officer, as such, any duty whatever, and compel him to perform it."

Ex parte Kentucky v. *Dennison,* 24 How. 66, 106, 107.

The Circuit Court which has entered judgment against a county on defaulted coupons, does right in granting mandamus directed to the County Supervisors to levy a special tax under a state statute which provides that if the county owes debts for the payment of which the current revenues are insufficient, the supervisors "may if deemed advisable levy a special tax."

Supervisors v. *United States,* 4 Wall. 435.

Von Hoffman v. *City of Quincy,* 4 Wall. 535, semble.

City of Galena v. *Amy,* 5 Wall. 705, semble.
Riggs v. *Johnson County,* 6 Wall. 166, semble.
Labette County Commissioners v. *United States,* 112 U. S. 217, semble.

But merely because mandamus has failed through the resignations of the officers commanded, the court will not enter a decree in equity to subject the taxable property of the citizens to the payment of the judgment and empower the marshal to seize and sell.
Rees v. *City of Watertown,* 19 Wall. 107.

The failure of the common-law remedy of mandamus, does not confer on a court of equity the power to levy the tax.
Heine v. *The Levee Commissioners,* 19 Wall. 655.

The extinction of the debtor public corporation, does not justify an order to the marshal to levy a tax.
Barkley v. *Levee Commissioners,* 93 U. S. 258.

A bill will not lie, at the suit of a judgment creditor, after mandamus has failed because of noncollection of taxes, to obtain the appointment of a receiver of tax books and past due tax bills.
Meriwether v. *Garrett,* 102 U. S. 472.
Thompson v. *Allen County,* 115 U. S. 550, semble.

The District Court of the United States in equity has no jurisdiction of a bill by bond holders for the appointment of a commissioner to levy a tax, when the taxing authorities had not performed their duty to levy a tax as required by the laws in force when the bonds were issued; because the obligations held by the creditors were under and not paramount to the authority of the state and "The right so given was to have a tax levied and collected, it is true, but a tax ordained by and depending on the sovereignty of the State and therefore limited in whatever way the State saw fit to limit it when, so to speak, it contracted to give the remedy."
Yost v. *Dallas County,* 236 U. S. 50, 56.

The marked difference between *Virginia* v. *West Virginia* and the decisions granting mandamus to compel the empowered officers to levy a tax to pay a judgment debt, is that here it is the State itself that is the judgment debtor and the State itself and its legislature, to whom it is sought to have the command given. The petitioner did not seek action except under the laws of the debtor state and by its authorities. The defence was the defendant's inviolable sovereignty. The comprehensive opinion of the Court disposes of this in this language:—

"That judicial power essentially involves the right to enforce the results of its exertion is elementary. And that this applies to the exertion of such power in controversies between States as the result of the exercise of original jurisdiction conferred upon this court by the Constitution is therefore certain" (591).

"As it is certain that governmental powers reserved to the States by the Constitution—their sovereignty—were the efficient cause of the general rule by which they were not subject to judicial power, that is, to be impleaded, it must follow that, when the Constitution gave original jurisdiction to this court to entertain at the instance of one State a suit against another, it must have been intended to modify the general rule, that is, to bring the States and their governmental authority within the exceptional judicial power which was created. No other rational explanation can be given for the provision. And the context of the Constitution, that is, the express prohibition which it contains as to the power of the States to contract with each other except with the consent of Congress, the limitations as to war and armies, obviously intended to prevent any of the States from resorting to force for the redress of any grievance real or imaginary, all harmonize with and give force to this conception of the operation and effect of the right to exert, at the prayer of one State, judicial authority over another" (595).

"As the powers to render the judgment and to enforce it arise from the grant in the Constitution on that subject, looked at from a generic point of view, both are federal powers and, comprehensively considered, are sustained by every authority of the federal government, judicial, legislative or executive, which may be appropriately exercised" (601).

As to the remedy of mandamus to compel taxation regardless of the claimed discretion of the Legislature to refuse to tax—(604) "we are of opinion that we should not now dispose of such question and should also now leave undetermined the further question, which, as the result of the inherent duty resting on us to give effect to the judicial power exercised, we have been led to consider on our own motion, that is, whether there is power to direct the levy of a tax adequate to pay the judgment and provide for its enforcement irrespective of state agencies."

The need of an announced decision was ended by the action of the parties (*Acts of West Virginia, Extraordinary Session,* April 1, 1919, Chapter 10; *Johnston* v. *Brown,* 300 Fed. 737, 739; 6 Fed. (2d) 372, 373).

Except for the pregnant language of the opinion, the questions remain open.

CONCLUSIONS.

As a repetition in summary form, I find that:—

1 A: The causes of the delay in obtaining approval of the construction of Controlling Works in the Chicago River are a total and inexcusable failure of the defendants to make an application to the Secretary of War for such approval.

2 A: The causes of the delay in providing for the construction of the Southwest Side Treatment Works are (1)

an inexcusable and planned postponement of the beginning of construction of these Works to January 1, 1935 which left an inadequate time for their completion before December 31, 1938, at the rate of progress expected or to be expected under the methods pursued by the Sanitary District, and (2) the failure to proceed to a definite decision as to a site and to the acquisition of the site so chosen, and (3) the failure to proceed with reasonable diligence to prepare designs, plans, and specifications for the Works at this site or on the site of the West Side Works.

3 A: The Sanitary District is not failing now to pursue the reasonable financial measures now within its control, which are necessary in order to carry out the decree of this Court.

1 B: The step which should now be taken to secure approval of Controlling Works is in an enlargement of the decree of April 21, 1930 by the addition of a paragraph enjoining the State of Illinois to provide forthwith the necessary money for, and through the Sanitary District of Chicago or through other instrumentality chosen by the State to submit plans forthwith to the Chief of Engineers of the War Department, for Controlling Works for the purpose of preventing reversals of the Chicago River at time of storm and the introduction of storm flow into Lake Michigan and to make application forthwith to the Secretary of War for authorization of such Works and diligently to pursue such application with all necessary modifications to secure within four months if possible the recommendation of the Chief of Engineers and the authorization of such Works by the Secretary of War, and immediately thereafter to begin and to continue to construct such Works to completion within two years.

2 B: The step which should now be taken for the construction of the Southwest Side Treatment Works or in case of a change in site for the construction of an adequate substitute, is in an enlargement of the decree of April

21, 1930 by the addition of a paragraph enjoining the State of Illinois to provide forthwith the necessary money for, and through the Sanitary District of Chicago or through other instrumentality chosen by the State, forthwith to determine upon and secure the site for the Southwest Side Treatment Works, if the site is not owned already by the Sanitary District and forthwith to design and to construct said Southwest Side Treatment Works of the kind proposed to the Special Master of this Court in 1929 or of a kind no less efficient for the purification of the effluent to be discharged to the Sanitary Canal and at a rate of progress forthwith that except for casualties not now foreseeable will result in the completion of said Works and the beginning of their operation in ordinary course before December 31, 1938.

The omission of reference at this point to the Calumet, West Side and North Side Treatment Works is because they are not within the Order appointing me.

3 B: The financial measures on the part of the State of Illinois which are reasonable and necessary in order to carry out the decree of this Court are in the enlargement of the decree by adding to it a paragraph providing that the State of Illinois be enjoined to appropriate through its General Assembly, before July 1, 1933, the sum of thirty-five million dollars to be expended before the end of the first fiscal quarter after the adjournment of the next regular session or in any event before October 1, 1934 and the same amount per year for each year ending on September thirtieth thereafter for the designing and the securing of authorization from the War Department and for construction of Controlling Works for the purpose of preventing reversals of the Chicago River at times of storm and the introduction of storm flow into Lake Michigan and for sites for, and for the engineering expenses of designing, and for the construction, enlargement, alteration and completion of the intercepting sewer tunnels, conduits, sewage treatment plants and pumping stations commonly known as the

Calumet Treatment Works, North Side Treatment Works, West Side Treatment Works and Southwest Side Treatment Works and all things appertaining thereto within the Sanitary District of Chicago, until all the same shall have been fully completed; and to incur indebtedness therefor and for the purposes aforesaid and no other to issue and to sell bonds of the State of Illinois for the amounts so appropriated and on such terms of payment and maturity and at such rates of interest as the General Assembly shall determine and without the laws authorizing the same being submitted to the people of Illinois and the said laws shall be valid and the bonds so issued if in other respects conforming to the Constitution and laws of the State of Illinois shall be valid obligations of the State of Illinois notwithstanding the fact that said laws have not been submitted to the people of Illinois either theretofore or thereafter and any sums expended for said Works by the Sanitary District of Chicago, hereafter, from its own funds in any year ending September thirtieth shall reduce by so much the amount of the appropriation for said year which the State of Illinois is hereby required to expend.

Respectfully submitted,

EDWARD F. MCCLENNEN,
Special Master.