QUARTERLY REPORT OF PROGRESS

Interstate commission on the Delaware River basin 1937-

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THE INTERSTATE COMMISSION ON THE DELAWARE RIVER BASIN

Quarterly Report of Progress

March 1 - May 30

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The Interstate Commission on the Delaware River Basin

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1. Reporting to Commissioners:

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Having passed from the "organization" into the "operating stage, it has been suggested that regular reports should be presented to each Commissioner, designed to contain - in concise summary form - the activities of the office headquarters, the progress registered by the various advisory groups of functional officials, and such other items as may be thought of interest. Appendices will include a complete record of more important developments.

Accordingly, this report represents the first of a series to be issued quarterly, computed on the basis of our June to June fiscal year.

2. Additional Assistance from the National Resources Committee:

Early in March, the National Resources Committee recommended the appointment of an engineering-planning consultant to INCODEL, submitting - at the same time - a panel of names from which the Commission was invited to make a selection. Recruitment was not limited to this group, but following communication with the members of the Planning and Engineering Sub-Committees, the Executive Committee agreed to the appointment of Mr. James H. Allen of Pittsburgh.

Mr. Allen arrived at the office on April 15, 1937 and has since been spending his entire time in connection with the work program later outlined.

3. Financial Report

The New York appropriation of \$7,500.00 covering its assigned share in the financing of the Commission for the fiscal year June 1, 1937 - May 31, 1938, was approved by the legislature and the Governor. The Chairman of the New York Joint Legislative Committee on Interstate Cooperation, Hon. Harold C. Ostertag, is entrusted with the stewardship of this fund, the expenditure of which is contingentupon the financial participation of New Jersey and Pennsylvania, in the amounts agreed upon.

New Jersey's pro-rata contribution of \$7,500.00, annually, was approved by the joint legislative appropriations committee, passed by the legislature, and signed by the Governor. It is restricted in expenditure, as above, to proportionate participation by the other states.

Pennsylvania was assigned to absorb \$12,500.00 of Commission expenditures annually. The general appropriation bill, adopted by both houses of the legislature, includes an item of \$25,000.00 to cover the state's share of our total fiscal outlay for the next biennium. This bill is now in the hands of the Governor.

In Delaware, where the recent session of the legislature was unsatisfactory, due to a partisan split between the Senate and House, the bill calling for the establishment of a Commission on Interstate Cooperation, was passed by the House but failed to be brought out in

the Senate during the closing days. This bill provided for an appropriation to the Commission, which is accordingly nullified. It is probable that other arrangements will be made for absorbing the relatively small amount of our budget for which Delaware was to be responsible.

4. Distribution of Publications:

There has been a considerable demand for copies of the "First Annual Report of the Interstate Commission on the Delaware River Basin", presented by Chairman Logue to the Third General Assembly of the Council of State Governments, on January 24, 1937, in Washington, D. C. More recently, the report of the Pennsylvania Commission on Interstate Cooperation has been printed, containing a somewhat amplified report of the Interstate Commission. Twelve hundred copies of this report were available but the demand has already exceeded the supply, as distributed from the offices of the Secretary of the Pennsylvania Senate and the Clerk of the House, from the central secretariat of the Council of State Governments, and from the Council's New York and Philadelphia offices. Reports #1 and #2 (for the years 1935 and 1936) of the New Jersey Commission on Interstate Cooperation have recently been distributed to the members of the Commission. The report of the New York Joint Legislative Committee on Interstate Cooperation for the year

1936, is now in the hands of the printer and will be available for distribution the latter part of this month.

5. General Publicity:

During the past quarter, two particular publicity "leads" were presented; the first, relative to the continued participation of the National Resources Committee in the program of the Commission; the second, concerning a public hearing on the water supply problem in the Philadelphia Metropolitan Area called by the Mayor of Philadelphia. The newspaper release is included as Appendix I; the statement presented at the public hearing is listed as Appendix II.

6. Philadelphia Water Commission:

Agitation for a renewal of inquiry as to a new source of water supply for the Philadelphia Metropolitan Area resulted in the appointment, by the Mayor of Philadelphia, of a Water Commission. Chairman Legue was appointed by Governor Earle to serve as his representative on the Commission.

Later, a technical committee was formed to investigate the various proposals advanced and to make recommendations to the Commission as a whole. Mr. .. Isaac S. Walker, who prepared the report on the Delaware River Basin for the National Resources Committee, and

thus was actively identified with the work of this Commission, is serving as a member of the technical committee. Mr. James H. Allen, the present consulting engineer to INCODEL - through appointment by the National Resources Committee - was also asked to serve on the committee and is spending considerable time in its behalf.

7. 1937 Legislation:

Soon after the convening of the legislative sessions the Commission was faced with the problem as to what attitude should be taken regarding legislation in the four states which might indirectly be of benefit to our interstate cooperative efforts but which, directly, concerned only a single state. In order to avoid confusion and conflict it was decided that, as a matter of present policy, the Commission should take no stand either for or against legislation primarily of intra-state concern.

Since the legislative session in Pennsylvania has just closed, with a number of bills awaiting consideration by the Governor, and since it has not been possible for the Commission's staff to secure and review the legislation adopted in New York and New Jersey (the latter legislature is in recess until June 28th) concerning water resources - in time for summarization in this report - an appraisal of the interstate effects of such

legislation will be prepared and distributed to the Commissioners at an early date.

In Pennsylvania, Senate Bill 52, introduced by Commissioner George A. Rupp, calling for the permanent establishment of the Commission on Interstate Cooperation, was adopted by both houses of the legislature and signed by the Governor. In accordance with a recommendation made at the Commission's Regional Conference on the Problems of the Delaware River Basin, held at Shawnee, Pennsylvania, October 2-3, of last year, a legislative act was drafted and adopted in New York and Pennsylvania to amend the conservation laws of the two states in relation to the reciprocal enforcement of violations of fishing laws in boundary waters.

In New York, the concurrent resolution:
continuing the life of the Joint Legislative Committee
on Interstate Cooperation, was adopted in both houses
of the legislature before adjournment.

8. Advisory Committees:

Planning:

The Committee on planning, following conversation and correspondence, outlined a work program which is included in Appendix III. The suggested project list recommended by the members of this committee has been referred to and improved by the State Planning Boards of New Jersey, New

York, and Pennsylvania. A joint meeting of the planning and engineering committees was held in Trenton, New Jersey, March 17, 1937.

ENGINEERING

Following the suggestion adopted at the Trenton meeting, two engineering sub-committees have been organized. In each case, the sub-committee members have been made official advisory members of their respective Commissions on Interstate Cooperation, through appointment by the Chairmen, and in each case the approval of the individual's department or agency has been secured.

The sub-committee on "Quality" composed of Messrs. Croft, Holmquist and Stevenson, Chief Engineers of the Health Departments of New Jersey, New York and Pennsylvania respectively, was charged with the responsibility of collecting existing data on the present and probable future uses and condition of the waters of the Delaware, with recommending standards of cleanliness for the water of the river, and with prescribing the quality of sewage and industrial waste effluents permitted to be discharged therein. This sub-committee met in mid-April, and again in mid-May, for two day sessions. A report of their activity is appended. (Appendix IV).

The sub-committee on "Quantity" is concerned with the equitable allocation of the water resources of

the Delaware River Basin. It consists of Mr. Howard T. Critchlow, Chief Engineer of the New Jersey Water Policy Commission, Mr. Charles E. Ryder, Chief Engineer of the Pennsylvania Water and Power Resources Board, and Mr. Russell Suter, Executive Engineer of the New York Water Power and Control Commission. This committee has just held its organization meeting, the Minutes of which appear as Appendix V.

9. Immediate Work Program:

As soon as the financial position of the Commission for the present fiscal year is determined, it is proposed to hold a two-day meeting of the entire Commission, and its advisory groups, for the purpose of reviewing accomplishments to date and to project what is hoped will be a full, effective work program for the current quarter.

Mr. James H. Allen has been devoting his efforts to several technical investigations suggested by the engineering committee, and to an active participation in behalf of the Philadelphia water supply commission, as explained in section 6.

. The Planning and Engineering Committees are operating in splendid spirit, and with enthusiasm. You are urged to read the appendices which explain, in full, the progress made thus far and which indicate the careful

and harmonious approach being made by these specialized groups to their respective problems.

10. Miscellaneous:

Your attention is called to the APRIL issue of "State Government", which contains a feature article describing the formation of the Interstate Commission on the Ohio Basin. This Commission has, in many respects, been patterned after the organization developed through INCODEL.

The JUNE issue of the same periodical, publication date - June 22, will follow up a feature which also appeared in the April number covering the membership and the accomplishments of the New York Joint Legislative Committee on Interstate Cooperation, by reviewing the work of the Pennsylvania Commission on Interstate Cooperation. A considerable section of this issue is to be devoted to the recent activities of INCODEL. Articles written by the Chairman, Hon. Thomas A. Logue, by Mr. Nathan B. Jacobs, Water Consultant of the National Resources Committee, by Mr. F. A. Pitkin, Director, Pennsylvania State Planning Board, and by Mr. W. L. Stevenson, Chief Engineer, Pennsylvania Department of Health, are included.

The JULY issue of "State Government" will feature the New Jersey Commission on Interstate Co-

operation.

- President Roosevelt - Message to Congress on Regional Planning, June 3, 1937. -

APPENDIX I

THE INTERSTATE COMMISSION ON THE DELAWARE RIVER BASIN 308 Franklin Trust Building, Philadelphia, Pennsylvania.

For Release March 25, 1937

Continued participation by the National Resources Committee in the program being formulated by the Interstate Commission on the Delaware River Basin has been assured, according to an announcement issued today by the Chairman, Hon. Thomas A. Logue, Secretary of Internal Affairs of Pennsylvania.

INCODEL, established six months ago as an official agency of the States of New York, New Jersey, Pennsylvania and Delaware through the authority granted to the Commissions on Interstate Cooperation in this area, is perfecting a program for the conservation and development of the natural resources of the Delaware River Basin.

The recent report of the National Resources Committee, presented to the President and recommended by him to Congress for action, emphasized the interstate character of the difficulties relating to water pollution and supply problems in this drainage basin: in that report the Interstate Commission was cited as a demonstration project, regional in nature, under which four states and the federal government working in close cooperation are preparing for definite action on the uses and abuses of the natural resources of this watershed.

In a letter announcing the recent action of the National Resources Committee, Mr. Charles E. Eliot, Executive Officer of the Committee wrote to Mr. Logue: "The Advisory

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Committee of the National Resources Committee is, as you know, anxious to cooperate to the utmost of our ability with the Interstate Commission on the Delaware River Basin. We have arranged to have some of our leading consultants on planning and water problems available for special calls, or requests from your organization. In addition, we are now prepared to appoint - subject to selection by your Commission - a water consultant, who will spend his entire time in the office of INCODEL, developing specific projects for consideration and action by the members of your Commission".

Mr. Logue, in announcing the granting of this federal aid, re-emphasized that the Interstate Commission on the Delaware River Basin is not engaged in a technical investigation of the water resources of this basin:

"Working in close cooperation with the State
Planning Boards, with the State Health Departments, and through the National Resources Committee - with all of
the agencies of the federal government concerned with
the related problems of water resources in this basin,
we are interested in getting results. At the same time,
however, we heartily subscribe to the viewpoint expressed
in the recent report of the National Resources Committee:
'that the adoption of a plan and program for the use and
control of the water of any river basin without a definitive
study of adequate and existing data bearing on all phases

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of the interlocking physical and cultural problems involved would be illogical, would result in an economic waste, would invite controversy, and might preclude desirable action later on.'

"We are seeking results," Mr. Logue added,
"but we want each step that we take to fit into a
pattern for the conservation and development of the
entire region. With this approach, the views of
all interested departments of the four state governments, and the federal government, are receiving and will continue to receive - consideration. We
will not sacrifice a unified, balanced program for
speed."

APPENDIX II

A Statement of the Interstate Commission on the Delaware River Basin, in connection with a public hearing on Water Supply Problems, held in the Mayor's Reception Room, City Hall, Philadelphia, on April 14, 1937, at 2:00 p. m.

The Philadelphia "water problem" has been controversial for about 140 years. Many different schemes, and combinations thereof, have been suggested and studied.

Basin composed of state legislators, administrators and planners, officially authorized, by legislative action, to consider the problem of water and land resources in this drainage basin, cooperated with the National Resources Committee in the preparation of the report on the Delaware River Basin. Only recently, the Commission has received further help from that Committee through the assignment of an expert engineer who is now spending his entire time following through the recommendations made in the report which the Commission has decided to advance.

We cannot emphasize too strongly the absolute need for pursuing a careful, balanced program for the whole Delaware River Basin, and in this particular case for the Philadelphia Metropolitan Area.

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We desire to assist Mayor Wilson to bring about a solution to this complex problem of securing a clean, pure, adequate supply of water for the city of Philadelphia and the metropolitan area as a whole.

We should not lose sight of the fact, however, that any new source of water supply for Philadelphia which may be decided upon is of tremendous importance to the other states and localities in the Basin as a whole.

In the light of the Supreme Court decision in the Delaware River Case the precedent seems to have been established that any future diversions from the Delaware or its tributaries, will have to be accompanied by provision for the release of compensation water in an amount agreeable to the other states affected.

Two years, and hundreds of thousans of dollars, were spent in settling this issue in the legal battle over the City of New York's plan to obtain additional water supply from New York States tributaries of the Upper Delaware River. To prevent a repetition of this dispute, the Engineering Committee of the Interstate Commission on the Delaware River Basin is now engaged in studying this problem, looking toward an amicable solution. This would seem to be an economy of time and money.

Also, we should not forget that enlightened engineering opinion of the present day no longer considers alone the question of water supply, as a single problem, or

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of pollution, as a single problem.

All uses to which water is put, - for drinking, for recreation, for navigation - and all abuses of water from which we should be protected - pollution and floods - should be thought of as joined together in a common problem.

The development of such an essential comprehensive plan is not an over-night job. It is not a task which can be accomplished without expert knowledge, effort and money.

With those who are impatient, with those who see in the recommendation of the National Resources Committee for further investigation merely a way of holding off solution, we have no argument. We simply point out that the controversy which has existed over the past hundred years, in respect to the water supply for Philadelphia - and in respect to all water resources in the basin - clearly indicates that there are still important facts to be determined, and conclusions to be reached in these matters before a new water plan can be adopted and carried out.

With these things in mind, the Interstate

Commission on the Delaware River Basin repeats the earnestness of its desire to cooperate with Mayor Wilson. His
goal - for a clean, pure, adequate water supply for

Philadelphia - is the goal of all sincere, honest individuals
who are in any way concerned with these problems.

APPENDIX III

PLANNING COMMITTEE ---- WORK PROGRAM

(As drafted jointly by Mr Russell VanNest Black, Director of the New Jersey State Planning Board, and Mr. F. A. Pitkin, Director of the Pennsylvania State Planning Board, concurred in by Mr. Wayne D. Heydecker, Director of the Division of State Planning, New York, and officially approved by the three state Planning Boards.)

The situation appears to call for two somewhat different but parallel and simultaneous lines of action; one, long range planning; the other, advancement of projects of already known merit and clearing the way for long range accomplishment through developed public opinion and needed legislation.

Long-range planning, in its technical aspects, can probably best be handled by the several state planning boards working in close cooperation. It is a long process. As a first step in cooperative planning for the basin area, we would suggest the preparation of a base map of the Basin to serve the purposes of a graphic record of existing conditions and of development proposals.

This base map probably should be made in the offices of one of the State Planning Boards, perhaps New Jersey or Pennsylvania, since these states have the greatest stake in the Basin. The New Jersey office is probably in the better position to do this work at this

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time and, therefore, volunteers to prepare the base map as rapidly as possible.

It is our further idea that the original of this map, at a scale of 1 inch equals 2 miles, be given to INCODEL and that INCODEL, in turn, supply the several state planning boards with copies for the recording of needed information for respective state areas, to be supplied the central office.

We are doubtful that much progress can be made with comprehensive planning for the Basin in advance of progress with comprehensive planning for the individual states but, pending results from the broad planning program, INCODEL can be supplied with sufficient approved projects to absorb the organization's full energy and resources. Such projects include:

- 1. Pollution prevention and abatement involving:
 - a Formulation and agreement upon standards of purity
 - b Enactment of such supplementary logislation as may be necessary.
 - c Clearance of financial difficulties
 - d Promotion of necessary controls and construction
- 2. Promulgation of decisions and agreements as to the future use, control, and equitable distribution of the waters of the Delaware River.
- 3. Promotion of the coastal highway, long proposed for construction between Washington and New England, especially with respect to the section within the Basin involving the construction of a new interstate bridge near Trenton.
- 4. Promotion of projected park improvements within

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the valley with special emphasis upon Roosevelt Park, which includes the Lehigh Navigation Company canal property and needed adjoining lands.

- 5. Promotion of interstate agreement and action in such matters as stocking the Delaware River with game fish.
- 6. Promotion of necessary legislation and other controls for protection of the scenic values and efficiency of the highways of the valley.

APPENDIX IV

"A" - Sub-Committee on "Quality"

1. MEMORANDUM

INCODEL'S sub-committee on "Quality" met in the New York State Health Department Office Building,
New York City, May 17 and 18, 1937, to continue its work in determining requirements to correct and control pollution in the interstate Delaware River. Those present included Messrs. Stevenson, Holmquist and Croft, the members of the sub-committee, and Messrs. Allen and Robinson of INCODEL. Mr. Hubert R. Gallagher, District Representative of the Council of State Governments, attended the sesson on May 18th.

Practically the entire time was devoted to study and consideration of a draft of minimum requirements presented by Mr. Stevenson and designed to maintain and improve high standards of cleanliness in the waters of the Delaware River in that part of the drainage basin lying above Easton-Phillipsburg. This draft attempted to bring about the desired results in a manner different from any previously tried and met the approval of the entire group. Among other things, the draft definitely separates the interstate Delaware River from intrastate tributaries; it recites the existing favorable conditions in this part of the basin; it emphasizes the recreational uses of this portion of the

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river and the possibility of its adoption as a source of water supply; it sets forth the minimum requirements which are necessary in order to maintain and improve the existing high standards of the water in the interstate river, from the New York-Pennsylvania boundary line to the confluence of the Lehigh River.

The draft, as revised and amended in accordance with the decisions of the committee during its meeting, is attached hereto. Attention is called to paragraph 2 of page 1 which divides the basin into five sections. This division was made for convenience and is not intended to be the committee's final recommendation.

The committee also gave consideration to that section of the river between Easton and Trenton. It was felt that this section, excepting the stretch from Easton southward for about ten miles, could be handled in a manner similar to the section lying above Easton and possibly with the same degree of restrictiveness. However, final decision in this matter was reserved pending further investigations to determine the probable future uses of this part of the drainage basin. The committee proposes to confer with the members of the Planning Committee in regard to this matter.

In addition to the above deliberations concerning pollution regulation, consideration was also given to several other related subjects during this

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meeting.

Mr. Allen presented a record study map of the basin upon which were shown the location of water intakes and points of discharge of sewage and industrial wastes. This information, furnished at the previous meeting in Trenton, was superimposed upon a study map prepared by the Pennsylvania State Planning Board to show the relative sanitary conditions of the Delaware River. Mr. Stevenson stated he believed that certain of the areas in which the influence of pollution scemed to be noticeable, as shown on the map, such as those lying immediately below Easton and Trenton, probably were somewhat less polluted, in terms of the sphere of influence, than the map indicates.

In this connection, in considering that section of the river between Easton and Trenton the Health Departments of New Jersey and Pennsylvania, through Mr. Croft and Mr. Stevenson, are to make a cooperative sanitary survey in order to determine the degree and distance of pollution influence caused by the Lehigh River, in addition to determining the effect of discharges from Easton and Phillipsburg.

Also, Mr. Croft of the New Jersey Health
Department, is making arrangements to collect samples
of water from the New Jersey tributaries of the Delaware
River which are influenced by tidal conditions to determine

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the effect of the tides on tributary streams. This sampling survey will cover a period of at least three months.

Mr. Holmquist reported that Mayor Wendell Phillips, Mr. Harrison Eddy and Mr. Speer apparently had recently been giving consideration to the Port Jervis situation. This led to the query as to whether or not it was the intent of the U. S. Supreme Court to require New York City to construct, operate, and maintain the Port Jervis treatment plant. The consensus of opinion seemed to be that the decree implies that New York City is responsible not only for construction, but also for operation and maintenance. It was agreed, however, that the question is a matter for legal interpretation. During this discussion, both Mr. Holmquist and Mr. Croft called attentiom to cases where large cities operate treatment plants on the watersheds from which their water supplies are taken.

Mr. Stevenson, in referring to the Lackawaxen River, reported that recent information from his
engineers indicate that the water of the Lackawaxen at
its confluence with the Delaware is as good in quality
as the water of the Delaware River.

Mt. Stevenson also raised the question as to whether or not hardness of water is a proper matter for

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regulation by the State Health Departments. In New York State, Mr. Holmquist reported, hardness may be considered in its relation to the quality of a given water supply. Mr. Stevenson and Mr. Croft have no legal authority to consider physical characteristics such as hardness.

Mr. Stevenson also inquired about the legality of New York's requiring Hancock to treat its sewage. Mr. Holmquist advised that this can be done.

Definite plans for the sub-committee's next meeting were not completed due to the uncertainties of the member's schedules. Mr. Holmquist and Mr. Croft will be able to meet the latter part of the week of June 13. Mr. Stevenson's schedule is as yet undetermined, but he will advise the members more definitely of his plans within a short time, probably during the week of May 23.

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"A" Sub-Committee on "Quality"

2. Draft of

Minimum Restrictions for the Correction and Control

Of Pollution of the Water of the Delaware River

From New York-Philadelphia Boundary Line to Confluence of

Lehigh River.

The Delaware River is of interstate concern. Its tributaries are of intrastate concern, except at their points of confluence with the Delaware River.

Considering the character and various uses of the interstate Delaware River, it is divided into five parts, to wit:- First, from the New-York-Pennsylvania boundary line to the confluence of the Lehigh River; second, thence to the head of tide water at Trenton, New Jersey; third, thence to Torresdale; fourth, thence to the Pennsylvania-Delaware boundary line; and fifth, thence to the Atlantic Ocean.

In general, the upper part of the Delaware
River Basin above the Lehigh River, including the area drained
by the northerly tributaries of the Lehigh River, is relatively
sparsely inhabited; it contains relatively few sewered
communities and relatively few industrial establishments
producing waste water. The streams draining this area are,
in general, relatively clean.

At present the principal use of the waters of this part of the drainage basin is for recreation. The relative cleanliness of the tributaries of this portion of the Delaware

"A" Sub-Committee on "Quality .

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River and the relatively high elevation of parts of these streams make them well adapted as sources of public water supplies, after treatment or purification.

In order to not only maintain but also to improve the relative cleanliness of the waters of the aforesaid part of the Delaware River Basin, it is a matter of interstate concern that existing pollution of the Delaware River from the New York-Pennsylvania boundary line to the confluence of the Lehigh River shall be corrected as soon as practicable, and that future pollution shall be controlled - both, in accordance with the minimum requirements as herein set forth.

In order to put and maintain the water in the interstate Delaware River from the New York-Pennsylvania boundary line to the confluence of the Lehigh River (at Easton, Pa.) in a clean and sanitary condition, no sewage, industrial wastes or other artificial polluting matter shall be discharged into, or be permitted to flow or to fall into, or be placed in the said part of the Delaware River, unless such sewage, industrial wastes or other artificial polluting matter shall first have been so treated as to produce an effluent at least equal to the following minimum requirements, to wit:

- 1. Any such effluent shall be free of noticeable floating solids, color, oil, grease or sleek, and practically free of settleable solids.
- 2. Any such effluent shall be sufficiently free of turbidity that will not cause noticeable turbidity in the water of the Delaware River.

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- and inorganic substances that, after diffusing and mixing with the water of the river, the effluent will not reduce the dissolved oxygen content of the water of the Delaware River below the point of discharge more than 5% of the dissolved oxygen content of the water of the river above the point of discharge. The dissolved oxygen determinations shall be based upon the average of results of examination of samples collected during a period of one week.
- 4. Any such effluent shall be sufficiently free of B. Coli
 Communis so that it will not create a menace to the public
 health through use of the water of the Delaware River for
 water supply, after treatment or purification, for
 recreation, bathing and other purposes.
- 5. Any such effluent shall be sufficiently free of toxic substances, acids, alkalis or other deleterious substances so that it will not create a menace to the public health through use of the water of the Delaware River for water supply, for recreation, bathing and other purposes; nor be inimical to fish, animal or aquatic life.
- 5. Any such effluent shall be free of offensive odors and also be free of substances capable of producing offensive tastes or odors in public water supplies derived from the Delaware River at any place below the discharge of such effluent.

Furthermore, in order to put and maintain the water

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of the interstate Delaware River from the New-York-Pennsylvania boundary line to the confluence of the Lehigh River (at Easton, Pa.) in a clean and sanitary condition, all sewage, industrial waste or other artificial polluting matter discharged into, or permitted to flow or to fall into, or be placed in any intrastate tributary of the aforesaid part of the interstate Delaware River shall be treated to that degree, if any, necessary to maintain the water of such intrastate tributary immediately above its confluence with said part of the interstate Delaware River in a clean and sanitary condition, at least equal to the clean and sanitary condition of the water of the Delaware River immediately above the confluence of such tributary.

As far as artificial causes are concerned, and during normal and low rates of stream flow, and during times when the Delaware River is not subject to storm run-off influence, it is the purpose and intent of the foregoing requirements as to treatment of sewage, industrial waste or other artificial polluting matter, and of the foregoing requirements as to effluents, and as to sanitary and cleanly quality of intrastate tributaries, to attain in the water of the interstate Delaware River from the New York-Pennsylvania boundary line to the confluence of the Lehigh River (at Easton, Pa.) the following conditions of cleanliness and sanitation, to wit:

1. The water of the river should be free of

"A" Sub-Committee on "Quality"

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noticeable turbidity, floating solids, color, oil, grease, sleek, offensive odors and sludge deposits.

- 2. The water of the river should be suitable for use by the public for water supplies after treatment or purification, for recreation, bathing and other purposes.
- 3. The water of the river should be suitable for the maintenance of fish and aquatic life, and suitable for agricultural purposes.

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<u>APPENDIX</u> <u>IV</u> ENGINEERING COMMITTEE - REPORT OF ACTIVITY

"B" Sub-Committee on "Quantity"

The engineering sub-committee on allocation of waters of the Delaware River, created at the suggestion of the engineering committee of INCODEL at its original meeting in Trenton, March 18, 1937, held its first meeting at the Philadelphia Office of INCODEL, June 3, 1937. Those in attendance included: Mr. Howard T. Critchlow, Chief Engineer of the New Jersey Water Policy Commission, Mr. Charles E, Ryder, Chief Engineer of the Pennsylvania Water and Power Resources Board, and Mr. Russell Suter, Executive Engineer of the New York Water Policy and Control Commission, the members of the sub-committee, and Mr. James H. Allen, Engineer INCODEL.

Mr. Allen opened the meeting by giving a brief history of events leading up to the appointment of the allocation committee. He explained that INCODEL was created early in 1936 as the result of a conference of members of the Commissions on Interstate Cooperation, and representatives of the National Resources Committee and local governments units with the view of providing a working agency to integrate and coordinate the activities of all agencies interested in and working upon the development of programs in the Delaware River Basin. He reviewed the work of the Water Resources Committee of the National Resources Committee in its study and

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report on the Basin and INCODEL'S part in this work; the follow-through activities of INCODEL leading to the meeting of its engineering committee in Trenton, March 18, and the discussions of this meeting. Mr. Allen also referred to the work of the U. S. Army Engineers in developing the "308" reports.

Mr. Suter wished to know just what was expected of this sub-committee; whether it was expected to consider allocation for water supply alone, or for other purposes such as power and possibly other uses.

Mr. Critchlow suggested that all reasonable uses probably should be considered, although the work might finally confine itself to water supply alone or water supply and power. Mr. Suter then called attention to the many complexities which would be introduced by power.

Mr. Critchlow referred to the work in New England on flood control, but the committee agreed that flood problems were not an important matter in the Delaware Basin.

Mr. Critchlow then queried, that if water supply was the principal consideration, was it the function of this committee to consider supplies from the tributaries as well as the main stream?

Mr. Suter then called attention to the question of permanent diversion such as that by New York City and temporary diversion such as would result by the taking of water by Philadelphia.

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These remarks led to discussion of the U. S. Supreme Court decree in the New York case and the agreement that the basis thereof was equitable allocation; and that this was not fixed, but left open, by the decision.

Mr. Allen referred to the work of the "Quality" committee, the procedure being followed and explained it was felt the outcome of the "Quality" committee's work would be the drafting of minimum restrictions, mutually acceptable to the "inter" states, to protect the sanitary condition of the Delaware and that these restrictions would be incorporated in a compact. He stated that probably this committee might wish to work upon the same lines as the "Quality" committee.

Mr. Ryder then stated he felt that the problems of the "Quality" committee were quite different from those of the "Quantity" committee. In the former case, there were definite conditions to tie together; the sanitary quality of the stream, either existing or to be desired, was known.

The problem resolved itself to the drafting of regulations which would maintain, or, if desirable, improve the conditions. In the case of quantity there were many complexities; the various uses, such as water supply, power, navigation, irrigation, etc., and that even if only one use such as water supply, was being considered it would be almost essential that a broad-range, comprehensive and approved plan be first developed as the foundation on which to develop allocation,

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diversion, and reserve flow standards.

Mr. Allen then called attention to the Philadelphia water supply problem stating it was his opinion that the matter of allocation and diversion would have to be gone into before Philadelphia could develop new sources from upland streams.

Mr. Ryder agreed but referred to the many uncertainties and variables involved in this matter; the numerous schemes proposed and the question of time when Philadelphia would actually be ready for a new supply.

Mr. Allen then asked Mr. Ryder about the allocation of waters act and pointed out that this also had a bearing on this problem. Mr. Allen also asked whether Mr. Ryder, in the administration of this act would make a study of the streams to determine upon proper allocation in advance of demand or need for their use. Mr. Ryder explained his department probably would generally consider situations as they arose.

Mr. Ryder then reviewed the recent situation in regard to the Philadelphia water supply as it has come to the attention of his department. General plans and general data have been furnished and study is being made of these. The proposals which have come to Mr. Ryder's attention are:

Mayor Wilson's - Renner plan Mitchell Palmer U. S. Army Engineers Philadelphia Bureau of Water - Yardley 1920 and 1924 reports New Lance schemes Lehigh Coal and Navigation

A brief discussion of the various schemes

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followed. It was the opinion that the Yardley scheme needed the Neshaminy Reservoir as proposed to prevent damage in the Delaware. Mr. Ryder also brought out that the proposed development of the Neshaminy would be complicated by reason of prior appropriations by the Philadel phia Suburban Company.

Mr. Allen asked, in view of the difficulties involved in attempting to allocate for all time or for a long period, whether any steps could be taken to work out something for a reasonably short period.

Mr. Ryder did not feel that this would accomplish anything. Mr. Critchlow thought it might show the federal government that the states meant business in getting things done in a cooperative manner.

Discussion of the policy of state planning of water supplies next took place. Mr. Ryder felt the Philadelphia water problem was its own problem and stated it was not the general policy of the state to work out community projects. He stated, however, that the recent allocation of waters act would accomplish state control in a desirable manner.

Mr. Critchlow stated that in New Jersey it was becoming necessary to have such control and authority as to bring about the development of joint water supplies or the combination of inter-connection of existing works.

Mr. Suter felt that New York State was being forced into state planning of water supplies more and more.

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Mr. Critchlow called attention to a paper which is to be read at the American Water Works meeting in Buffalo by Mr. Menard upon allocation of waters on interstate streams. He suggested that possibly something of value to this committee might be brought out in this paper.

Mr. Suter, referring more particularly to this committee's activities stated he felt something useful should be done; that perhaps the committee might consider the theory of allocation and review the principles involved or set up requirements which would have to be met in case of diversion or the construction of dams; that the committee also might review the 1927 work.

Mr. Allen asked about the principles upon which the suggested allocation of the 1927 work was based whereby 600 M.G.D. was alloted to both New Jersey and New York and 900 M.G.D. to Pennsylvania.

It was explained that these amounts were decided upon to meet the New York situation and were not based upon any detailed determinations of equitable allocation.

Mr. Allen referred to the Army Engineers' estimates of future water supply requirements for New York, New Jersey and Pennsylvania and inquired whether this might not be considered as a comprehensive program of water supply needs. The opinion of the committee was that Army Engineers' plan should not be taken as the basis.

In view of the indefiniteness and difficulty of

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deciding upon a working program the committe agreed that the best procedure would be to meet again in the near future probably with the full Commission, Mr. Jacobs and other interested officials, if any. At that time the difficulties could be again reviewed and further efforts be made to initiate a practical program upon which effective results could be anticipated. Prior to such meeting, the members will give further thought to the problem and submit suggestions to the central office of INCODEL.

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