



UNITED STATES
DEPARTMENT OF THE INTERIOR
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION
GREAT LAKES REGION
33 EAST CONGRESS PARKWAY, ROOM 410
CHICAGO, ILLINOIS 60605

December 8, 1969

MEMORANDUM

TO: SEE BELOW

FROM: H. W. Poston, Regional Director

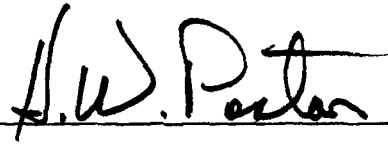
SUBJECT: Monthly Regional Director's Report to the Commissioner

Transmitted herewith is a summary of the Great Lakes
Regional activities for the month of November.

ADDRESSEES: Commissioner (2)
Associate Commissioner (2)
Assistant Commissioners (5) Administration (9)
Regional Directors (2)
Northwest Region (3)
South Central Region (5)
Ohio Basin Region (4)
GLR Program/Laboratory Directors (1)
Washington: Charles Rogers (1)
(FWPCA) W. A. Cawley (1)
R. P. Nalesnik (2)
Mrs. Hibbs (1)
Dr. W. A. Brungs, Jr., Newtown, Ohio (1)
A. D. Sidio, Cincinnati, Ohio (1)

PERIOD COVERED: November 1969

REGIONAL DIRECTOR: H. W. Poston

Individual Program CommentsTechnical Services

The Lake Ontario Basin Office's thermistor array was successfully tested in Lake Ontario. A manual on the construction and use of the thermistor array is presently being written. Copies will be made available to other basin offices when completed. The thermistor array was designed and constructed by Don Casey. Several spot current-metering measurements were made in the Rochester embayment.

The results of analyses for total nitrogen phosphate, iron and volatile solids tests on 22 bottom sediment samples from the Lake Ontario June cruise, 1969, are nearly completed. A correlation of results from the bottom sediment analyses with lake water stations at the same sampling site will then be undertaken.

Plans were finalized for the anticipated field activities of the study of the Mississippi River, St. Louis sector, to be conducted during the first half of December.

The microbiology and chemistry laboratories of the Lake Michigan Basin Office completed analysis of routine water samples from the Calumet Surveillance Area. The organic laboratory completed analysis of samples from an oil spill collected by the U. S. Coast Guard from the Rouge River October 9. Identification was also completed on oil pollution from Lake Michigan in Buffington Harbor.

The Rochester and Syracuse regional offices of the New York State Department of Health are correcting and updating tables for the Oswego River basin report which is being revised for review and approval for joint publication with NYSDH. Data on municipal and industrial waste discharges and waste treatment needs will be firm as of December 1, 1969.

A coordinated survey with the University of Rochester is being made to determine the pollutional effect of various nutrients contributing to algal growths in Irondequoit Bay. The laboratory has completed the analyses of the first set of samples which will be submitted on a quarterly basis. In a joint effort with the New York State Department of Health, the laboratory (Lake Ontario Basin Office) is currently analyzing industrial waste effluents for total and soluble phosphates.

The chemistry and microbiology sections (Lake Michigan Basin Office) analyzed samples from the Calumet Surveillance Area. Laboratory contributions to the Mississippi River study report conducted in the vicinity of Dubuque, Iowa in September were completed.

MONTHLY REGIONAL DIRECTOR'S REPORT - November 1969

Federal Activities

A meeting was held at the Naval Reserve Training Armory, Chicago on November 7, at which were representatives of the Ninth Naval District, U. S. Coast Guard, State of Illinois, Metropolitan Sanitary District of Chicago, City of Chicago-Water and Sewer Department, Naval Reserve Training Command, and FWPCA. The purpose of the meeting was to discuss proposals pertaining to a proposed sanitary sewer and lift station to discharge wastes from the Naval Armory, the USS PARLE, and pleasure craft in Monroe Street Harbor to the Chicago municipal sewer system. Proposals made at the meeting and concurred in by those in attendance were: (1) The State of Illinois to construct the sewer and that it be extended to the limit of state property 400 feet east of the Naval Armory. (2) The sewer to be extended to the USS PARLE and that a contract be made between the State and the Navy for a period of 5 years to enable the Navy to pay the remainder of the necessary costs which are chargeable to them. (3) An FWPCA research and demonstration grant be applied and to provide a site for test facilities for new devices for adequate treating or disposal of vessel wastes.

At the request of the Regional Director, statements were prepared regarding changes in the status of waste treatment for disposal facilities at Federal installations in the Lake Michigan basin. This information was prepared for possible use in connection with the upcoming Governors' conference on Lake Michigan pollution.

A review was made of an application for Federal permit to dredge a 300 ft., small-boat channel in Lake Huron (Saginaw Bay) at Caseville, Michigan; dredged material to be placed in the waterway. It was requested that this permit not be granted unless the applicant agrees to dispose of the dredged material on upland property to prevent leaching of potential pollutational materials into Lake Huron or within a completely enclosed diked area.

The St. Paul, Minnesota Corps of Engineers' district engineer informed FWPCA that he would refer to the division engineer the question of our objection to the disposal of materials to be dredged from a private slip in the Duluth-Superior Harbor into another area of the Harbor. The district engineer was informed that samples collected in September 1968 from the vicinity of the proposed dredging revealed evidence of moderate pollution in the bottom sediments, including some sludge worms and that we believe the bottom sediments within a short distance of the sampling station would exhibit essentially the same characteristics. We further informed the district engineer that we believe this is sufficient evidence of conditions existing in the project area and that our recommendation was consistent with Recommendation No. 17 of the FWPCA Lake Superior report.

MONTHLY REGIONAL DIRECTOR'S REPORT - November 1969

Research and Development

A staff member of the UMR-Lake Superior Basin Office met with the executive director/chief engineer of the Minneapolis-St. Paul Sanitary District and the project director for the District's storm and combined sewer demonstration project, to discuss the preparation of the final project report. The project has amassed a large quantity of data, and discussions centered on the handling and interpretation of the data, as well as methods of presenting this data in a meaningful manner in the final report.

The period of performance for Contract No. 14-12-20, "An Investigation of Storm and Combined Sewer Pollution At Bucyrus, Ohio" was successfully concluded. Sequentially, Lake Erie Basin Office's representative assigned this project and met with the contractor to discuss preparation of the final report.

L. Breimhurst, UMR-Lake Superior Basin Office, met with Dr. Wehking, project director of the River Falls, Wisconsin demonstration project of the channel aeration process for the aerobic digestion of sewage sludges. Difficulty in maintaining dissolved oxygen in the channel has developed and it appears that modifications will be necessary. Modifications being considered include providing more openings in the channel enclosure to permit greater air transfer and adding a brush aerator at the far end of the channel.

Enforcement

Reserve Mining Company, the largest discharger to Lake Superior, sent a 14-page statement to the Lake Superior conferees stating the company feels there is no support to the charges FWPCA made at the Executive Session that taconite tailings have caused interstate pollution; that tailings have an adverse effect on fish life; and that tailings are entering into solution. The company feels there is no definite evidence of any pollution in Lake Superior caused by their discharge, hence, the conferees' conclusion that "presumptive evidence" was in the record to indicate there might be pollution is invalid.

A review was made of the status of pollution control at Moench Tannery and Peter Cooper Glue Works at Gowanda, New York. It was learned that the original schedules established at the March 22, 1967 Lake Erie Enforcement Conference are not being met and that New York has set revised schedules.

Dale Bryson, Director of the UMR-Lake Superior Basin Office, met with John Badalich, Director of the Minnesota Pollution Control Agency (MPCA), to discuss and implement actions concerning the Twin Cities-Upper Mississippi River Enforcement Conference. Future meetings were scheduled to discuss and resolve storm water overflow problems and their relationship to ongoing research and development projects, wastes from watercraft and status of waste

MONTHLY REGIONAL DIRECTOR'S REPORT - November 1969

disposal at South St. Paul. Immediately following the meeting with Mr. Badalich, officials from South St. Paul joined the meeting to discuss the status of their abatement program. They are thinking in terms of a year's evaluation for recently completed works before any further engineering studies are made to determine what additional facilities are needed to comply with conference recommendations. This would mean they would not comply before 2+ years after the final conference date. This proposal is unacceptable to FWPCA and they were so informed. FWPCA recommended that South St. Paul submit to the MPCA by February 15, 1970 their plans and schedule for total compliance with the conference recommendations, keeping in mind the conference timetable. MPCA and South St. Paul agreed to the proposal. MPCA will monitor progress towards this goal.

Several members of the staff of the Lake Erie Basin Office, plus two people from the Ohio Department of Health, inspected waste treatment facilities of the U. S. Steel plant at Lorain, Ohio. Several minor problems were noted but the only major problem seemed to be from the coke plant discharge. U. S. Steel offered solutions to each one of the problems identified.

On November 21 and 22, a total of 9,700 gallons of oil was removed from the Nordmeer. Weather conditions prevented return to the Nordmeer for the remainder of the week. The salvage vessel MASSEY D made attempts to reach the Nordmeer on November 27 and 28 but was turned back because of heavy seas and high winds. Steam boilers have been acquired for heating the oil to improve flow characteristics.

A meeting was held with the Iowa Department of Health and representatives of the Governor's office to obtain improvements in their FY '70 water pollution control program. It was agreed that they will submit a supplement to their plan to provide for necessary additions and at that time, the evaluation report will be finalized and submitted to Headquarters.

Water Quality Standards

A review was made of "Quality Criteria for Reclaimed Water" in response to a request from Headquarters. The technical staffs of the Regional Office, the Basin Offices and the National Water Quality Laboratory submitted their reviews which were compiled into a regional review and submitted to Washington.

Final work was completed on a summary of Wisconsin's interstate water quality standards and it was approved for publication. Preparations are under way to ready the booklet for printing.

Cooperative Programs

The State of Minnesota's program plan for their pollution control agency was approved by Commissioner Dominick on November 5, 1969.

MONTHLY REGIONAL DIRECTOR'S REPORT - November 1969

Construction Grants

On the heels of a policy declaration issued by the Commissioner on the desirability of regionalization of sewage treatment facilities, two significant developments happened in the Great Lakes Region. The Warren, Michigan project, which was tendered a Federal grant offer a month ago contingent upon connecting to the Detroit Metropolitan Sewerage System as outlined in the FWPCA Lake Erie report, advised FWPCA that it could not accept the offer with that condition in the offer. Accordingly, we have advised Warren that the entire grant offer has been withdrawn because of Warren's failure to insure that it will connect to the Detroit Sewerage System. The Michigan State grant offer for this project will also be withdrawn according to the State agency. In an allied development, the construction grants chief appeared before a joint meeting of the Winona and Goodview, Minnesota Village Councils to urge that Goodview join with Winona in a regional treatment facility. Final action by Goodview will be taken in about six weeks. The possibility of funding any Goodview project that does not connect to Winona will be remote, if not impossible.

The \$650 million deep tunnel plan announced by the City of Chicago recently to control overflows from combined sewers, has been reviewed for preliminary construction grants eligibility. It appears that such a project could be eligible for construction grant participation, but the proposal has been forwarded to Headquarters for further review before a final eligibility decision. Construction of this massive project would eliminate flooding and pollution overflows for rain storms up to one inch.

Messrs. Bryson, (UMR-Lake Superior Basin Office) McDonald, (Regional Office) and Ginner, (Minnesota Pollution Control Agency) met with the City Councils of Winona, Minnesota and Goodview, Minnesota in joint session to discuss and encourage Goodview to join Winona in a regional sewage treatment plant. It was made quite clear the Federal and State pollution control agencies would accept nothing less than a joint facility.

Just before adjournment on November 14, the Wisconsin Assembly approved a bill that would authorize the State to issue \$144 million to help Wisconsin communities build sewage treatment plants. Between now and the scheduled reconvening in January, a Joint Senate-Assembly Committee will attempt to resolve the differences between this measure and the previously approved Senate action which had authorized the issuance of an additional \$56 million to buy public recreational land.

An inventory of all projects in the Lake Michigan Basin that have either already received construction grant assistance or, on the basis of identifiable needs, may apply for future grants was computed in anticipatory preparation for the December 17 "Save Lake Michigan Seminar" that will be co-hosted by the Secretary and the 4-State

MONTHLY REGIONAL DIRECTOR'S REPORT - November 1969

Governors. Grants totaling in excess of \$34 million in support of \$121 million of construction have been made to 218 municipalities in the basin. There are 410 identifiable potential projects that will cost at least \$300 million with grant requests in excess of \$132 million. These estimated costs and grant requests are based on needs through 1974 and will undoubtedly prove to be conservative.

After weeks of involvement by various levels of the Federal Water Pollution Control Administration and the Department of the Interior, the first leg of a Federal grant for the \$80 million Detroit treatment and sewer expansion project was approved by the Great Lakes Region. The grant was approved with the proviso that such approval in no way constitutes an approval of any modified water quality criteria or implementation dates relating to water quality standards or enforcement proceedings in the Detroit area. The next leg of the Detroit program--which will amount to an estimated \$79 million in additional construction--will be started during the next calendar year. This particular project represents the largest project in which the Great Lakes Region has ever participated.

The Chicago Sanitary District will soon file a formal request for participation in the cost of land required to dispose of the Districts' sludge. In answer to a verbal request for participation in such land acquisition costs, the District was informed that site acquisition costs are not eligible for Federal participation under the construction grants program. However, the District wishes to make a formal written request for an eligibility determination because it believes that the purpose of the land on which the sludge is disposed is an extension of the treatment process and, therefore, should be eligible for Federal aid.

Pollution Surveillance

On November 24, a large amount of oil was reported by a Trenton, Michigan resident on the Trenton Channel between the free (Wayne County) bridge and toll bridge leading to Grosse Ile, Michigan. The source was not identified. On November 25, an oil spill was reported by the Coast Guard on the St. Clair River in the vicinity of Marysville. The source was not identified. State and Federal agencies were notified of both spills.

The preventive angle of oil contingency planning is beginning to yield some results. As a result of the flooding of Wood River, Illinois area oil refinery waste treatment facilities during July '69 the FWPCA met with Army Corps of Engineers, U. S. Coast Guard and Illinois Sanitary Water Board officials to discuss the events of the July flood and the need for preventing a recurrence of oil discharges as a result of future high water stages of the Mississippi River. The Water Board recently informed FWPCA that they have asked Shell Oil Company, American Oil Company, Clark Oil and Refining Company and National Marine Service to provide 100-year flood level protection by April 1, 1970.

MONTHLY REGIONAL DIRECTOR'S REPORT - November 1969

National Water Quality Laboratory

Nearly all preparations are completed for introducing the toxicant into the natural stream at Cincinnati. The fish collecting screens are in place, and functioning better than expected. Many additional tests of toxicity and persistence of copper in the stream water have been completed in preparation for the actual introduction. The cause of the greatly different toxicity of copper in the stream water at various times has not yet been identified, but we believe that careful planning and control will permit us to introduce copper at this time.

The completion of several tests of the effect of temperature on the reproductive capacity of two different species of freshwater scuds show that at constant temperatures of 24 and 27°C there is little or no reproduction of these animals. One species was considerably more temperature sensitive than the other.

Construction of equipment is now completed to begin chronic exposures of minnows to sodium fluoride and a pesticide. Repeated requests have been received for information about safe levels of fluorides, and that test has been initiated to provide information on safe levels. The pesticide work is being initiated in anticipation of the needs for establishing pesticide standards, which may be required by the legislation currently in the Congress.

The first tests in which the activity of a fish is measured as related to exposure to toxicants have indicated promising possibilities for using this tool to detect stress caused by pollutants, and perhaps monitor industrial waste streams, as well as predict harmful concentrations without going through the exposures. Apparatus is now being readied to test in detail the utility of this approach and demonstrate its usefulness.

Analyses have been completed for a number of parameters in the blood of catfish exposed to a pollutant for nearly two years. Careful scrutiny of the data may provide clues as to whether or not these parameters can be used to predict the effects of an exposure without actually completing the long-term chronic test.

Some progress has been made during the month in regard to measuring that part of the metal in water which is biologically active and exerts a toxic effect. It is becoming clear that for many of the heavy metals it is highly probable that only a small portion of the total amount present is actually biologically active, and if our testing is to be realistic and our standards are to be valid, we must know which component is exerting an adverse effect and what level of that component is acceptable to the organisms to be protected. This question has become very critical in regard to the effects of taconite tailings on Lake Superior and some of the techniques developed may be very useful in assessing the significance of minerals containing heavy metals in Lake Superior water.

MONTHLY REGIONAL DIRECTOR'S REPORT - November 1969

The Laboratory participated in a meeting with the Wisconsin Department of Natural Resources regarding the problem of TNT plant wastes discharged into Lake Superior near Ashland, Wisconsin. Laboratory results on chemical and toxicological tests performed on the effluent were presented to the State and the implications of various methods of disposition were discussed.

At the Bayport field station, the temperatures in the experimental tanks are now being raised and five species of fish are in the tanks and doing well at the present. Some of the disease problems seem to have been resolved, principally by obtaining higher quality fish to begin with, and by spreading the fish out into more tanks after they were delivered to the station. There is some hope that we will be successful with at least four species of fish; largemouth bass, channel catfish, northern pike, and bluegills.

International Program

Plans are being initiated to resume the central basin dissolved oxygen depletion study during the summer of 1970. Preliminary contacts are being made with the Canadian Inland Waters Branch for a joint study.

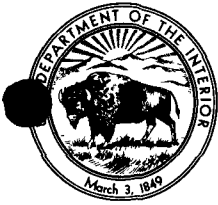
Public Information

In response to a request from Washington, a staff member of the Lake Erie Basin Office traveled to Mantua, Ohio to evaluate and report on the extent of a recent community project to clean up a portion of the Cuyahoga River.

Administrative Services

<u>Personnel Staffing</u>	<u>September 30,</u>	<u>1969 October 31,</u>	<u>November 30,</u>
A. Total Positions	217	218	217
B. Total Personnel on Board	216	214	215
C. Total Personnel Gains	1	1	3
1. New Hires	1	1	1
2. Transfers	0	0	2
D. Total Personnel Losses	3	3	2
1. Resignations	0	1	0
2. Transfers	3	2	2

####



UNITED STATES
DEPARTMENT OF THE INTERIOR
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION
GREAT LAKES REGION
33 EAST CONGRESS PARKWAY, ROOM 410
CHICAGO, ILLINOIS 60605

November 14, 1969

MEMORANDUM

TO: SEE BELOW

FROM: H. W. Poston, Regional Director *H.W. Poston*

SUBJECT: Monthly Regional Director's Report to the Commissioner

Transmitted herewith is a summary of the Great Lakes
Regional activities for the month of October.

ADDRESSES: Commissioner (2)
Deputy Commissioner (2)
Assistant Commissioners (5) (Administration 9)
Regional Directors (2)
GLR Program and Laboratory Directors (1)

PERIOD COVERED: October 1969

REGIONAL DIRECTOR: H. W. Poston



I. Regional Activities

The Great Lakes Region announced it was taking immediate steps to remove oil from the wreckage of the abandoned motor vessel Nordmeer. The Nordmeer has been aground for two years on a sand bar in Lake Huron, approximately 12 miles northeast of Alpena, Michigan. The vessel went aground with approximately 48,000 gallons of oil in its tank. The Detroit District of the Corps of Engineers and the Ninth Coast Guard District took part in locating the Nordmeer and in determining the amount of oil present. L. B. O'Leary, Director of the Lake Huron Basin Office of Federal Water Pollution Control Administration, Grosse Ile, Michigan, was designated as project officer to negotiate for a contract to remove the oil. This is the first such action undertaken by the Department of the Interior in the Great Lakes under the Oil Pollution Act of 1924.

A thirty per cent increase in oil and hazardous chemical spills has been recorded in the Great Lakes Region, according to H. W. Poston. Mr. Poston emphasized that these are in addition to the daily discharges from the known pollution sources which are under abatement action. He reported that "in the first nine months of 1969, 126 spills have been documented by FWPCA's Pollution Surveillance branch. That figure compares with only 94 spills recorded for the entire year of 1968." He said that increased cooperation between FWPCA, the Coast Guard, Corps of Engineers and state and local agencies may be one reason for the increase, but he added there appears to be a real increase as well. Mr. Poston said the largest number of traceable oil spills have been industrial discharges, which have accounted for roughly one-third of all spills, and one-half of the spills that can be pinned down to a specific cause. Together, the Lake Michigan and Lake Huron basins accounted for 81 per cent of all the reported spills. The Lake Huron Basin Office reported 54 spills, or 43 per cent of the total, while the Lake Michigan Basin Office showed 48 spills or 38 per cent of the total.

II. Individual Program Comments

A. Water Quality Standards

Dr. Don Mount, Director of the National Water Quality Laboratory in Duluth, Minnesota, appeared before the Joint Atomic Energy Committee of the House and Senate

MONTHLY REGIONAL DIRECTOR'S REPORT - October 1969

in Washington. The committee was conducting hearings on the potential for thermal pollution at nuclear power plants. Dr. Mount detailed considerations that must be made in establishing temperature standards for rivers and lakes.

Notice was filed in the Federal Register of October 31, 1969, proposing water quality standards for those Iowa rivers previously excepted. These include the Mississippi and Missouri Rivers. These standards are based upon material presented at conferences held in Davenport, Iowa, on April 8-9, 1969, and in Council Bluffs, Iowa, on April 15-16, 1969. The proposed standards would require secondary treatment which would achieve a 90% reduction of BOD at all municipalities by the end of 1973. Continuous disinfection would be required of all municipal waste treatment discharges when discharged into interstate waters designated for public water supplies. Phenol limits from other than man-made sources would be set at one part per billion. Man-made heat sources would be limited such that discharges shall not raise the average daily temperature more than 5°F; nor be harmful to locally occurring fish; nor exceed at any time a temperature of 90°F. The notice further states that dilution shall not be considered a substitute for proper waste treatment at any time. Interested persons have 90 days to file written comments or additional data for consideration. The final notice is to be published in six months.

A detailed status report was submitted to Washington outlining all remaining "exceptions" from water quality standards. Suggested procedures for resolving these exceptions were included along with prospects for settlements. Also, as part of the effort to remove exceptions and to propose revisions where suitable, a review of implementation plans to determine enforcement procedures presently used by the states was compiled and is being sent to them for review.

Informal hearings concerning alleged water quality standards violations were held October 7-8 in Cleveland, Ohio, and October 9 in Toledo, Ohio. The Cleveland hearings involved waste discharges from U. S. Steel Corporation, Jones and Laughlin Steel Company, and Republic Steel Corporation to the Cuyahoga River and then to Cleveland Harbor. The Toledo hearings dealt with discharges by the City of Toledo and Interlake Steel Company to the Maumee River. The hearings affected some immediately noticeable results in that U. S. Steel, Jones and Laughlin Steel, and Interlake Steel agreed to provide additional pollution abatement, to speed up their

MONTHLY REGIONAL DIRECTOR'S REPORT - October 1969

program, or to meet their established schedules. U. S. Steel, through in-plant control cleaned up one of its discharges. The City of Toledo, which had been over a year behind its schedule, submitted its final plans to the State of Ohio which then approved them. The Director of the Lake Erie Basin Office visited the Regional Office to confer with the Regional Director regarding follow-up plans to the recent informal hearings in Cleveland and Toledo. It was decided to carry out a survey of the Cuyahoga River to determine precise treatment needs for each waste discharger. It was also decided that the entities cited in the informal hearings should somehow now be directed in order to meet water quality standards. The form that this direction will take has not been decided.

B. Comprehensive Planning

The annual report covering the first year's work on the Section 3(c) Planning Grant-Milwaukee River Basin planning study was received from Southeastern Wisconsin Regional Planning Commission. The report was submitted in draft form with a request for review and suggested revisions before submittal of the formal annual report. The grant is \$50,000/year for two years.

C. Technical Services

Zack Dobbs, chemist at the Lake Ontario Basin Office, completed the analyses of lake cruise samples for silica, magnesium and sulfates using the automated Technicon. The analyses of samples taken from sites in the Oak Orchard Creek area has been completed. Particular emphasis is being placed on the phosphate and nitrogen tests and whether a nutrient build-up is occurring as the result of agricultural runoff in this area.

Backlog tributary surveillance samples for the last six months of the year are currently being analyzed. The laboratory completed the analysis of two Round Robin Cyanide Samples in participation with other laboratories of the Great Lakes Region.

D. Federal Activities

Two Lake Erie Basin Office biologists traveled to Paulding County, Ohio to observe possible biological ramifications in the channeling of the Little Auglaize River. This is a flood control project of the U. S. Department of Agriculture's Soil Conservation Service.

MONTHLY REGIONAL DIRECTOR'S REPORT - October 1969

An evaluation of the low flow augmentation potential was made for a considered multiple-purpose reservoir in Ellicott Creek, New York. The considered improvement, referred to as Sandridge Reservoir, is being studied by the New York State Division of Water Resources in connection with their study of the Erie-Niagara basin. Unofficial comments were requested by the Corps of Engineers who must submit a report by the end of this year.

Robert Bowden, Howard Zar and other members of the Technical Activities Branch of the Lake Michigan Basin Office surveyed Lake Michigan in the vicinity of the fossil fuel power plant at Waukegan, Illinois; also at the site of the proposed nuclear power at Zion, Illinois on October 8 and 9. Water and benthic samples were taken and temperature soundings were recorded. Radio-chemistry received nine water samples for gross beta and alpha determinations from Lake Michigan in the Zion, Illinois area. Additional water and bottom sediment samples were taken to send to the National Field Investigation Center in Cincinnati, Ohio for gamma scanning and uranium and strontium analysis.

A report on the history of Federal Water Pollution Control Administration actions to effect abatement of raw sewage discharges from the Toledo Coast Guard Station, Toledo, Ohio, was prepared and forwarded to a Toledo city councilwoman in response to questions which she raised during the October 9, 1969 Water Quality Standards Hearings in Toledo.

A telephone request was received from the Corps of Engineers, North Central Division, for information pertaining to vessel waste treatment and/or holding facilities. Information was provided on all types of units which are presently known to this office, such that they would be able to evaluate the several types for possible installation on Corps of Engineers floating plants.

In reply to a letter of October 16, 1969 from the District Engineer, Corps of Engineers, St. Louis District, pertaining to operation and environmental problems at the Monsanto Pumping Station, the Corps was informed that FWPCA considers effluent from the Village of Sauget sewage treatment plant is a pollutant and that exposure to the fumes from this effluent represents a health hazard. The Corps was also informed that the continuous operation of the pumping station is a key to the successful operation of the project.

MONTHLY REGIONAL DIRECTOR'S REPORT - October 1969

E. Enforcement

The summary was issued for the Second Session of the Calumet Area Enforcement Conference which was held December 11-12, 1968 and January 29, 1969, in Chicago. The Conferees required their Technical Committee, which was established at the December meeting, to submit a report on the adequacy of treatment requirements in the conference areas prior to the next progress meeting. The Conferees also agreed to submit quarterly progress reports on each industry for which extensions have been recommended. In his issuing letter, the Secretary of Interior included schedules for abating pollution. He stated, "It is recommended that effective progress toward abating pollution may be made by... industries if they meet the remedial schedules listed...."

The Director of the Lake Erie Basin Office met with the City of Cleveland and together they visited Research Oil and Refining Company, a notorious oil polluter of the lower Cuyahoga River. The company was told by the City that they would be shut down if they didn't stop dumping oil in the Cuyahoga River. The company agreed to stop.

The City of Cleveland had constructed a barrier in an overloaded sewer line to divert excess sewage and industrial wastes to the Cuyahoga River. After discussions, the City agreed to remove the barriers and to take the necessary steps to convey all the sewage to the sewage plant.

The Lake Superior enforcement conference executive session was held in Duluth. A large crowd of approximately 300 people observed the conferees in their deliberations. Most of FWPCA's proposed conclusions and recommendations were adopted. One conclusion said there is presumptive evidence that taconite tailings are causing pollution of Lake Superior. The adopted recommendation concerning Reserve Mining Company requires the company to undertake further engineering and economic studies relating to ways and means of reducing discharges of tailings to Lake Superior. The plan should be submitted to the conferees in six months. A technical committee was established to resolve problems on the proposed water quality criteria.

Minnesota's Attorney General announced formation of a legal task force for environmental protection. The six-member task force consists of two special assistant attorneys general assigned full-time to

MONTHLY REGIONAL DIRECTOR'S REPORT - October 1969

the Minnesota Pollution Control Agency (MPCA) and four other members of the Attorney General's staff, all trial lawyers. The task force will be aided by ten volunteer lawyers on the Attorney General's staff. The task force will work closely with the MPCA and will be charged with bringing court action against persons, firms and municipalities certified to it by the MPCA as causing air or water pollution.

F. Cooperative Programs

An evaluation report on Minnesota's FY'70 program plan was prepared and forwarded to headquarters. Comments on New York's FY'70 program plan prepared by the Lake Ontario Basin Office were received and forwarded to headquarters and the Northeast Region for inclusion in their summary evaluation report. All review comments have been received on the Iowa FY'70 program plan. Iowa provided the additional information requested for inclusion in their plan and copies were provided to the Program Directors and Lake Michigan Basin for review and comments. Michigan submitted their final report which details FY'69 water pollution control expenditures.

A copy of a letter addressed to Mr. A. D. Sidio, from Mr. Jack Smith, Missouri Water Pollution Board, was received in this office. This letter stated that meetings had been held with representatives of the Metropolitan St. Louis Sewer District, National Lead Company and Missouri Water Pollution Board to discuss a program to be submitted to Mr. Sidio, regarding a proposal for water quality improvement in the Mississippi River by the National Lead Company. A copy of this letter was forwarded to Col. Decker, District Engineer, Corps of Engineers, St. Louis District for his information, and with the request that we be informed of any further developments.

We were informed by the Federal Activities Office in Washington that the Department of Defense had requested the Bureau of the Budget to delete the proposed waste treatment facilities project at Fort Sheridan from the FY 1971 A-81 program, on the basis of Sec. 807 timing provisions. Washington was informed that we do not concur with this deletion, and recommended that the BOB review the request because if these funds are not made available, this Federal installation will not be able to comply with the time schedule established by the Lake Michigan Enforcement Conference, whether they make the decision to upgrade their existing treatment facilities or connect to the North Shore sanitary system. The information provided was considered to be satisfactory for referral to the BOB.

MONTHLY REGIONAL DIRECTOR'S REPORT - October 1969

G. Construction Grants

The principle theme of the semi-annual Construction Grants Chiefs meeting held in Washington was the different type of construction grant program that can be expected in the future. It will be a much bigger program in terms of available funds, there will be more staff needed for the program, new rules and regulations governing the program will be unfolded as the months go by, and, all in all, many changes can be expected to produce a program that results in cleaning up the nation's streams as fast as possible. This type of theme was stressed by the Assistant Secretary and all other top level headquarters officials connected with the program.

The Regional Office has recommended disapproval of a construction grant application from Cedar Rapids, Iowa. The application requests Federal aid to support the construction of what we have determined to be a collection sewer. Inasmuch as this is the entire application, it has been referred to Commissioner Dominick for formal disapproval action in \$78,900 Federal grant request.

A funded priority and application for the proposed Callender, Iowa project has been returned to the state in accordance with the applicant's request. In reviewing the application, we had requested confirmation of the applicant's ability to meet the construction starting deadline and at the council meeting held to discuss this matter it was decided that project construction would be deferred. The Elburn, Illinois possible reimbursement application was also returned to the state because the community decided to proceed with the project without any possibility of future grant. This is the first time an applicant has requested we discontinue servicing a possible reimbursement project.

H. Pollution Surveillance

An investigation of the lower Minnesota River to determine the cause of the low dissolved oxygen was made in cooperation with the Minnesota Pollution Control Agency. The Agency visited each discharger on the lower 30 miles of the river while personnel collected river water samples in an attempt to isolate the source. The Agency failed to collect samples of the discharges; however, preliminary results of the river samples indicate the source to be in the

MONTHLY REGIONAL DIRECTOR'S REPORT - October 1969

Chaska-Shakopee area. Circumstantial evidence points the finger at the American Crystal Sugar Company in Chaska. Strangely enough, the dissolved oxygen began rising after the first inquiry by the MPCA and is now near normal levels.

The automatic water quality monitor on the Minnesota River recorded a significant drop in the dissolved oxygen content of the river (from 7.0 mg/l to 3.0 mg/l in 10 hours). The Minnesota Pollution Control Agency was notified and is investigating.

An investigation of taste and odor problems in the Mississippi River below St. Louis has revealed high carbon chloroform extract and threshold odor.

On October 24 the Lake Erie Basin Office was notified of a fish kill in Lake Erie at Euclid, Ohio. Investigators estimated over 10,000 fish, mostly Eastern Gizzardshad, were killed. Samples were taken and preliminary analysis indicated that cyanides were present in both the lake water and effluent from storm overflows. Water samples and dead fish were sent to the Duluth lab for more detailed examination. The state and city were both notified, and investigation is continuing.

Several sections of the Lake Michigan Basin Office laboratory branch completed portions of the first draft of the report on water quality investigations of the Mississippi River in the vicinity of Dubuque, Iowa. The chemistry and biology sections completed analysis of selected samples from the Mississippi River study at Dubuque, Iowa.

Staff members of the Lake Michigan Basin Office investigated a spill in the north branch of the Chicago River of 1,000 gallons of transmission oil from a CTA garage. This spill was contained and cleaned up.

I. Research and Development

A visit was made to the South St. Paul Sewage Treatment Works to discuss the future scheduling of the research and demonstration grant. Polymer testing will be conducted on the industrial flowage of Swift and Company until they cease operations on November 25, 1969. Following this, testing will continue on domestic sewage until January 1, 1970, at which time all plant scale testing will be discontinued. Discussions are scheduled with the city and the Minnesota Pollution Control Agency to reach a common understanding so that delays in construction of adequate treatment facilities at South St. Paul will not be delayed.

MONTHLY REGIONAL DIRECTOR'S REPORT - October 1969

J. National Water Quality Laboratory - Duluth

As a result of a fish kill on the St. Louis River that occurred the last week in August, staff members became involved in bacteriological analyses on the St. Louis River, and have followed up the situation resulting from low flow and the discharge of raw wastes into that river. They have gathered valuable information on the growth rates and persistence of pathogenic bacteria in the St. Louis River in relation to suitability as a body-contact recreational area. Rather high counts of several important pathogenic bacteria have been found in the river, and concurrent use for swimming by the children in West Duluth was observed at the time these counts occurred. We anticipate that this will provide "a realistic outdoor laboratory" in which to evaluate water quality criteria for recreational usage.

A method of measuring breathing rates of small aquatic organisms, including fish, has been developed and is arranged in such a way that there are no wires or electrodes attached to the experimental animals. This method may provide a very sensitive tool for assessing stress resulting from exposure to toxic materials after only short periods of time, and could also be very valuable for monitoring changes in industrial waste effluents. Literature has been reviewed on the toxicity of over 100 substances to bluegills in preparation for evaluating the spectrum of toxic materials for which such a measure might be useful.

The analyses of core samples taken from the western end of Lake Superior for taconite tailings have been completed, and the results were reported to the reconvened session of the Lake Superior Enforcement Conference. The conferees accepted our conclusion that taconite tailings do occur in Wisconsin. Bioassay tests in which Daphnia and trout eggs are being exposed to tailings are in progress in an attempt to determine at what concentration of suspended tailings an adverse effect occurs. Daphnia tests have been completed at prevailing lake temperatures, and egg tests are now under way.

Apparatus has been assembled and testing is about to begin to determine the need for a winter chill period for initiation of yellow perch reproduction. This aspect of the required annual thermal regime in a body of water is very important to our standard-setting process. We need to know if a chill period is needed and what magnitude of difference is required between summer and winter temperatures in order to initiate reproduction.

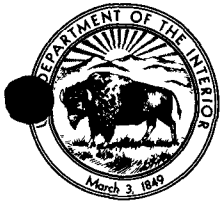
MONTHLY REGIONAL DIRECTOR'S REPORT - October 1969

III. Administrative Services

The Twin Cities Naval Air Station has been directed by the Department of Defense to close by July 1, 1970. Details of the closing have not been finalized by the Navy. No information is available as to the final disposition of the property. Mr. Bryson, Director of the Upper Mississippi River-Lake Superior Basin Office has discussed with the Base Commander the status of FWPCA facilities with respect to the closing. Captain Clark has recommended to the Department of Defense that no action be taken to vacate FWPCA offices. Should GSA take over the facilities after the Navy withdraws, a move by FWPCA now would be inappropriate.

<u>Personnel Staffing</u>	<u>August 31, 1969</u>	<u>September 30, 1969</u>	<u>October 31, 1969</u>
A. Total Positions	219	217	218
B. Total Personnel on Board	218	216	214
C. Total Personnel Gains	1	1	1
1. New Hires	1	1	1
2. Transfers	0	0	0
D. Total Personnel Losses	2	3	3
1. Resignations	0	0	1
2. Transfers	2	3	2

#



UNITED STATES
DEPARTMENT OF THE INTERIOR
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION
GREAT LAKES REGION
33 EAST CONGRESS PARKWAY, ROOM 410
CHICAGO, ILLINOIS 60605

October 9, 1969

MEMORANDUM

TO: SEE BELOW

FROM: H. W. Poston, Regional Director

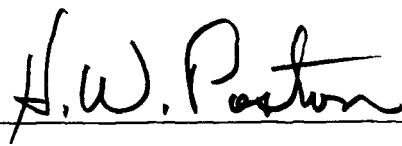
SUBJECT: Monthly Regional Director's Report to the Commissioner

Transmitted herewith is a summary of the Great Lakes
Regional activities for the month of September.

ADDRESSES: Commissioner (2)
Deputy Commissioner (2)
Assistant Commissioners (5) Administration (9)
Regional Directors (2)
GLR Program and Laboratory Directors (1)

PERIOD COVERED: September 1969

REGIONAL DIRECTOR: H. W. Poston

I. Regional Activities

Secretary of the Interior Hickel spoke before the Executives' Club of Chicago on September 19. Secretary Hickel took note of the new tools in abatement such as the 180 day notices for polluters in Lake Erie. He also talked about new mechanisms for financing, and warned that the government will prosecute those who pollute.

II. Individual Program CommentsA. Water Quality Standards

The Wisconsin Interstate Water Quality Standards Summary was submitted to Headquarters for formal review.

B. Comprehensive Planning

The Minnesota River Basin report was reviewed at Headquarters and returned to the UMR-Lake Superior Basin Office for minor revisions and final typing. This report, which was prepared for the Corps of Engineers, presents results of a study on water supply and water quality control needs in the Minnesota River for use in multipurpose water resource planning.


Comments received from work group members on the Water Quality Appendixes for Lakes Michigan, Huron, and Erie were collected and forwarded to Team Captains. Only a few work group members submitted comments. The first draft of Sections 1-4 for Lake Ontario Basin was distributed to work group members for comments.

First draft of Sections 1-4 for Lake Superior Basin was received and distributed to work group members for comments. This completes the first phase for the preparation of the Water Quality Appendix for all five of the lake basins.

C. Technical Services

The two-week survey of the Mississippi River in the Dubuque area started on September 15, 1969. All laboratory personnel in the Lake Michigan Basin Office were involved in analyzing samples from the Mississippi River study.

A status report on a nuclear power plant owned by Rochester Gas and Electric has been prepared for the Regional Director. This plant will go into operation within the next two to three weeks.



E. Enforcement

A final draft of initial sections of the "Mississippi River Water Quality Evaluation and Surveillance Report--St. Louis Area" was received from the Metropolitan St. Louis Sewer District and is undergoing review. The complete report is expected in early October.

D. ~~Federal Activities~~ The Summary of the July 22, 1969 Upper Mississippi River Congress Evaluation Meeting was issued. The Summary pointed out that though extensions of construction schedules were initially requested by three dischargers, the Conferees agreed no extensions.

Following the August reconvening of the Calumet Enforcement Action, in-plant inspections were made of all industries which had not yet abated or had just recently abated pollutional discharges. These inspections to 18 industries were to determine progress in meeting conference requirements. Slippage from schedules previously submitted by the industries was found, but assurance was obtained that final dates would be met.

The Executive Session of the Lake Superior Enforcement Conference was held in Duluth on September 30-October 1, 1969. The "Summary and Conclusions" and "Recommendations" were adopted by the Conferees and will be submitted to the Secretary of the Interior. The Conferees concluded that there was presumptive evidence in the conference record to indicate that the discharge from the Reserve Mining Company endangers the health and welfare of persons in States other than those in which such discharges originate and that this pollution is subject to abatement under provisions of the Federal Water Pollution Control Act. The Conferees recommended: that a technical committee be formed to propose needed upgrading of Lake Superior water quality standards; that Reserve Mining report within six months on alternate methods for disposing of their taconite tailings; that secondary treatment, phosphate removal (80% removal on a State basis), and disinfection be provided by all dischargers to Lake Superior or interstate tributary streams; the establishment of insecticide concentration limits; and the establishment of other pollution control programs. The conference will reconvene in approximately six months to receive required reports and evaluate progress.

On September 3-11, 1969, the Chief, Pollution Surveillance Branch, inspected industries cited in the Calumet Area Enforcement Conference, to determine the status of construction and if the industries would meet the proposed conference deadline. Mr. Earl Knight, Metropolitan Sanitary District of Greater Chicago; Mr. Sam Moore, Indiana Stream Pollution Control Board; and Carl Blomgren, Illinois State Sanitary Water Board; participated in the inspections in their area of interest.

A cooperative effort between the Minnesota State Department of Education and the St. Cloud Vocational School has led to the formation of a committee including the above plus the Minnesota Pollution Control Agency, Mr. M. Robins, Executive Director and Chief Engineer of the Minneapolis-St. Paul Sanitary District, and possibly Mr. D. Bryson, Director of the UMR-Lake Superior Basin Office, to develop a two-year course in environmental technology. The two-year course would include water pollution, air pollution and solid waste disposal subjects geared for the high school graduate. With respect to the water pollution courses, this would lead to employment as treatment plant operators. Tentative plans call for a pilot course to start in the fall of 1970.

The entire staff of the Lake Erie Basin Office, plus outside help from Chicago, Cincinnati, Rochester and Detroit, prepared for informal hearings on the Cuyahoga and Maumee Rivers. Activities have included outfall, river, sediment and lake sampling and analysis; bioassays; and photography. Trips have been made to Chicago, Toledo, Columbus and Washington to seek information and prepare testimony.

A meeting was held September 16 at the Detroit Metropolitan Water Board Office to discuss progress being made toward meeting the 1970 date for completion of facilities. Present at the meeting were G. J. Remus, General Manager, and H. E. Werner, Assistant Chief Engineer of Detroit Metropolitan Water Services, R. W. Purdy, Executive Secretary, and J. E. Vogt, Chairman, Michigan Water Resources Commission and L. B. O'Leary, Director, Lake Huron Basin Office.

F. Cooperative Programs

New York's FY '70 water pollution program plan was received from the Northeast Region and provided to the Lake Ontario Basin Office for review and comment.

Clarence C. Oster conducted surveys of flood damaged sanitary sewerage facilities in Iowa. Nine cities were investigated for the Office of Emergency Preparedness and approximately \$100,000 was recommended to the OEP as being eligible for reimbursement monies. Eight cities remain to be surveyed under the August 14, 1969 Disaster Declaration Date.

G. Construction Grants

A notice of withdrawal of the \$46,500 grant offer to the Village of Cosmos, Minnesota, has been sent to the Mayor. The withdrawal notice was sent because of the refusal of

the Village Council to award a project construction contract following receipt of bids. Several Council members objected to the project and, thereby, have tied up further action. Unless the Village can demonstrate its intent to move forward in the immediate future, the grant withdrawal will become effective in 30 days.

The State of Michigan has announced detailed guidelines for implementing the two new FWPCA construction grant offer conditions--namely, (1) the preparation of a tailor-made STP manual for each project and (2) start-up training for plant employees. As the Michigan O&M program moves forward, the Michigan guidelines will be watched by FWPCA for compliance with the grant offer O&M conditions.

A consulting engineers file of over 300 engineers that have worked on at least one construction grant project at one time or another, has been surveyed to determine the number of consultants currently active on ongoing projects. Our survey has determined that 128 engineers are currently working on 354 active projects. On future mass mailouts to consultants on important notices on the construction grants program, the mailouts will be limited to active consultants only.

Minnesota has received grant applications for FY 1970 construction grant funds from 55 applicants. The total estimated construction costs covered by these applications is \$46.6 million. The applicants have requested \$14 million in Federal aid, which is approximately four times as much aid as is currently available to the State.

A public hearing held in Chicago by the U. S. Department of Labor to determine compliance with Federally-assisted construction projects resulted in several stormy and disruptive demonstrations by construction workers. Those connected with the hearing have implied that sufficient evidence of discrimination on Federal projects exists to terminate some existing construction contracts. The degree to which the FWPCA Construction Grants Program will be affected is not yet clear.

The Chicago Sanitary District Board of Trustees has passed a strong resolution urging Congress to appropriate the full billion dollar construction grant authorization for this fiscal year. In the meantime, Vinton Bacon, the General Superintendent of the Sanitary District, has sharply criticized, in the press, the lack of adequate construction grant financing.

There is some fear that the State of Michigan will be unable to sell the first segment of its \$335 million State

grant matching bond issue. Bonds went on sale October 7 at a 6 percent maximum interest rate. In the event the bonds are not sold, permission will be sought from the State legislature to boost the allowable interest rate above the statutory 6 percent ceiling.

The Wisconsin water pollution control agency has issued a policy statement designed to discourage the proliferation of small sewage treatment plants in urban areas. The statement recommends the use of larger urban facilities as opposed to the continued construction of a number of small inefficient treatment plants.

H. Pollution Surveillance

The Lake Ontario Basin Office has received from the New York State Health Department their 1969 coliform data for beaches in the Rochester area. This data indicates that the water quality at Ontario and Durand Eastman Beaches has improved.

Mr. Richardson of the Lake Huron Basin Office acted as technical advisor on an inspection of the M/V Nordmeer at Alpena, Michigan. Divers inspected the oil tanks under contract with the Corps of Engineers to obtain an estimate of the amount of oil remaining in the vessel. The Coast Guard also took part in the investigation.

Messrs. O'Leary and Richardson, Lake Huron Basin Office, met in the U. S. Attorney's office with representatives of the Corps of Engineers and Coast Guard to discuss methods for expediting oil pollution cases in the Detroit area.

Due to difficulties with the Coast Guard, the proposed Mississippi River chemistry work and the loss of a chemist to Cleveland for several weeks, the fall cruise on Lake Ontario was called off.

One person was killed and four homes were destroyed at Warsaw, New York, when a gasoline truck overturned onto an oncoming car near the bottom of a twisting hill on Route 20A. The spilled gasoline set fire to four houses and caused the leaching of the asphalt from a newly paved road. It also caused explosions in the sewers and popping of manhole covers. The sewage treatment plant had to be shut down and resultant bypassing of wastewater resulted in fish kills on Oatka Creek. Considerable foam was used to prevent additional explosions. The asphalt which leached from the pavement, adhered to the creek banks in the vicinity of the community's outfall. Water intakes 10 and 20 miles downstream were not affected.

I. National Water Quality Laboratory - Duluth

Data on taconite tailings was presented in a technical report by the National Water Quality Lab at the Lake Superior Enforcement Conference.

The involvement of the laboratory in translating technical findings and unpublished information into a usable form for standards setting has continued to increase and occupy more staff time.

Approximately one man-month was devoted to the preparation of recommended temperature standards to protect the aquatic life in Lake Michigan. Existing temperature records from various points in the Lake were received from the region and were compiled and reviewed in light of their significance to the organisms within the Lake.

Time was also devoted to assisting the Ohio Basin Region with the development of temperature standards for the Ohio River. Aquatic life in the Ohio River was divided into four categories--one for cold water, and three for warm water fish, and based upon the tolerance of the species. Maximum and mean temperatures for each month, or in some cases, two-week periods, were recommended. The Engineering Committee accepted the validity of our recommendations, but unfortunately, the final decisions on standards have not yet been reached. We believe that a landmark of progress was achieved because those involved recognized that there can not be one or two magic numbers for temperature which will be all-inclusive and all-protective.

The laboratory was requested by the Lake Huron Basin Office to test the toxicity of Dresinate-95 to aquatic life forms. This material was suspected as being the cause of a fish kill in the Detroit area. It had a surprisingly high bactericidal effect, causing reductions in growth as low as 1 ug/l. The toxicology report was transmitted to the Lake Huron Basin Office.

A meeting was held during the week of September 15 with the personnel from the Corvallis Laboratory and the National Thermal Research Program. We were pleased to find essentially no overlap between the present programs, and we feel that under the new agreement the programs should complement each other significantly.

The contract with Aerojet regarding the development of a method for determining water quality criteria for recreational use is under way. It appears to the staff members, at the present time, that the same old problem will "bug"

this contract that is troublesome in other areas, and that is the lack of hard data upon which to base any mathematical model, or any conclusions.

In the work to find shortcut methods to circumvent long-term exposures for predicting safe copper concentrations, some of the first experiments suggest that the measurement of breathing rates may provide a useful tool for predicting sublethal effects for copper. Blue-gills exposed to a concentration approximating the 96-hour TL_m value responded very quickly by changing their breathing rates.

The quarter's work on the experimental stream near Cincinnati has been a revealing one. We realize even more the complex problems that affect the validity of any single standard for a natural waterway. It became obvious that the toxicity of copper in this water below the sewage plant varied by a factor of 40, depending on the stage of stream flow. To date, it has not been possible to relate the change in toxicity to the volume of flow, the relative contribution of the sewage treatment plant to the stream, or to turbidity. The present intent is to begin adding copper to the stream the first of November with the clear realization that the values selected may be entirely too low, or too high, under certain flow conditions. It seems that only by launching into the exposure, can we really identify the major problems that must be resolved in this complex situation.

During the quarter, a research team was designated with the primary responsibility of developing methodology for investigating fish kills. We were pleased to learn of the increased emphasis being placed on the investigation of fish kills by headquarters, and we intend to cooperate as much as possible with this effort in the future. It is our intent to include a broad spectrum of investigative techniques in this activity, including the diagnosis of disease-caused problems, parasites, toxicants, and environmental conditions.

III. Administrative Services

	July 31, 1969	August 30, 1969	September 30, 1969
<u>Personnel Staffing</u>			
A. Total Positions	221	219	217
B. Total Personnel on Board	219	218	216
C. Total Personnel Gains	0	1	1
1. New Hires	0	1	1
2. Transfers	0	0	0
D. Total Personnel Losses	1	2	3
1. Resignations	1	0	0
2. Transfers	0	2	3

#



UNITED STATES
DEPARTMENT OF THE INTERIOR
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION
GREAT LAKES REGION
33 EAST CONGRESS PARKWAY, ROOM 410
CHICAGO, ILLINOIS 60605

MEMORANDUM

September 9, 1969

TO: SEE BELOW

FROM: H. W. Poston, Regional Director

SUBJECT: Monthly Regional Director's Report to the Commissioner

Transmitted herewith is a summary of the Great Lakes
Region activities for the month of August.

ADDRESSEES: Commissioner (2)
Deputy Commissioner (2)
Assistant Commissioners (5)
Assistant Commissioner Admin. (9)
Regional Directors (2)
GLR Program Directors; Lab Director (1)

PERIOD COVERED: August 1969

REGIONAL DIRECTOR: H. W. Poston

H. W. Poston

I. Regional Activities

Regional Office

other industries and municipalities, were "waiting in the wings" with similar requests using the same approach of river quality.

B. Comprehensive Planning

First drafts of the Lake Michigan, Lake Huron and Lake Erie portions of the Appendix 7, Great Lakes Basin Framework Study were distributed to members of the Water Quality Work Group.

Revised draft of the FWPCA portion of the Oakley Reservoir report was transmitted to Washington.

C. Technical Services

With the assistance of the Great Lakes Division, Canada Center for Inland Waters, a 35-foot core of central Lake Erie bottom sediment was obtained. A detailed chemical and biological analysis is to be done in an attempt to determine more exactly the natural (and artificial) rate of eutrophication.

D. Federal Activities

Russel Voegtlen and Walter Grantz of the Toledo Port Authority visited the Lake Erie Basin Office to discuss their plans for providing diked areas to deposit Maumee River dredgings. The Port Authority will provide diked enclosures, at no cost to the Corps of Engineers, for many years to come.

FWPCA's Contracts Compliance Officer participated in several meetings with a number of other federal agencies involved in administering federally-assisted construction programs. The purpose of the meetings was to explore the federal government's role and position in relation to the current Chicago dispute between the construction building trades and the black Coalition for United Community Action. One of the prime purposes of the black coalition is to insure equal employment opportunity in the building trades for all regardless of race, color or creed.

E. Construction Grants

Messrs. O'Leary, McDonald, Cayer, and Potter, of FWPCA, Great Lakes Region, met with Michigan Bureau of Water Management and Michigan Department of Public Health staff members in Lansing to review the state's training and instruction programs for the personnel who will be operating newly constructed treatment plants. This is in line with intensive FWPCA efforts to improve and upgrade the operation and maintenance of facilities constructed with federal grant assistance.

The Chicago Sanitary District has said that plans and specifications will be completed by the end of 1969 on 48 sewer and plant construction projects totaling over \$127 million. Authority for advertising the initial 8 projects (all of which involve contracts over \$1 million) has been sought from the District's Board of Trustees. In commenting upon the list of projects, FWPCA urged the consolidation of as many related contracts as possible into one application as opposed to a profusion of separate related grant applications.

The 1-year needs list from Michigan has been received and reveals that Michigan will consider for certification 68 projects for priority this year. The total construction cost of the projects is \$135 million. Inasmuch as any Michigan project certified this year will receive a combined federal-state grant of 55 per cent, the total grant outlay for these 68 projects would be \$74.5 million. However, it is understood that Michigan will certify only 53 projects because one of the conditions of certification is that the project must be placed under construction by December 31, 1969. Fifteen of the 68 projects have apparently been unable to assure that such a construction date can be met. It is expected that certified projects will start being sent to FWPCA momentarily.

The Minneapolis-St. Paul Sanitary District began full operation of their secondary plant. However, they were required to curtail the plant operation because of the excessive drain on the power supply in the Twin Cities area, caused by running of air conditioners because of the continuing hot weather.

A request from headquarters for a survey on the number of active projects for which industrial wastes comprise at least 75 per cent of the total waste volume has revealed that there are only five active construction grant projects in the Great Lakes Region. The overall total project load is approximately 300.

The Chicago Sanitary District has inquired on the possible eligibility of trucks, barges, or pipeline to haul sludge from its Chicago plants to sludge disposal sites near Ottawa, Illinois, which is approximately 50-60 miles away. This is the land reclamation project whereby MSD hopes to ultimately solve its gigantic sludge disposal problem. FWPCA has not yet ruled on the eligibility question.

During the course of a final inspection at one of the Milwaukee sewage treatment plants, it was learned that Milwaukee is currently achieving a 95 per cent reduction in total phosphorus removal in a pilot project at the Jones Island sewage treatment plant. The high phosphate removal rate is being achieved by the addition of waste pickle

liquor received free of charge from a local steel company. If the pilot project continues to prove out, Milwaukee is considering the possibility of applying the pickle liquor to the total 200 mg/d Jones Island plant to achieve 95 per cent phosphorus reduction on a total plant basis. This could be a major breakthrough in controlling nutrients in Lake Michigan.

Following receipt of a grant application for mechanical and electrical improvements at Milwaukee's Jones Island treatment plant, the State of Wisconsin and the Milwaukee Sewerage Commission have once again been advised by us that it will not be possible to approve grant applications (whether for immediate funding or as possible reimbursements) at the Jones Island plant. The reason for FWPCA hold up on such applications is the fact that Milwaukee is in default in complying with the installation of chlorination facilities at the Jones Island plant. Such facilities were supposed to be installed and operating by last May, but to date the plans and specifications and necessary funding has not been developed for these facilities.

A visit to the Sauget, Illinois, WPC-Ill.-264, waste treatment works project by the Deputy Chief revealed a problem typical of that area on the Mississippi River across from St. Louis. Almost every project financed by FWPCA in this highly industrialized area is experiencing severe operating problems and Sauget is no exception. The entire Sauget grant will be withheld until such time as it can be demonstrated that an operable treatment facility exists in Sauget. This particular plant is one of the largest and most highly industrialized treatment plants ever financed by this Region.

F. Pollution Surveillance

Observation runs on the Detroit, Rouge, and Raisin Rivers were completed. The Detroit River appeared to be in good condition. Outfall observations were normal except for McLouth Steel and Wyandotte Chemicals which were discharging unusual amounts of suspended solids. Slight traces of oil were observed on the Raisin and Rouge Rivers.

Martin R. Wahl, Aerial Photography Specialist, was accompanied by Lake Erie Basin Office's microbiologist on a picture-taking flight of the area. This included the Cleveland shoreline, Cuyahoga River industrial area, Kelleys Island, Western Lake Erie, Maumee Bay, Toledo Harbor, the Detroit-Raisin-Rouge industrial complex, Sterling State Park and Magee Marsh State Reservation. Noticeable water pollution sites were photographed, and when possible, pollution sources were traced. Also photographed were the dredging dike fills, and the dramatically visible algal and plankton blooms in the island areas.

A meeting was held with Cleveland water supply personnel in regard to the poor water quality at the Crown water intake. Cleveland reported the water quality to be the worst ever. All water quality data in the vicinity of the intake and at the filtration plant were reviewed. It is the Lake Erie Basin Office's belief that the intake line is broken and drawing in low quality bottom water.

A citizen who had complained to his Congressman relative to water and air pollution from a Hooker Chemical Corporation waste chemical dump was contacted. Observations were made of the area surrounding the disposal site. For several years, sealed drums of chemicals have and are being deposited within sections enclosed by above-ground earth dikes. Odorous chemicals having the appearance of heavy oil are seeping through the dikes. Efforts have been made to intercept this seepage but it is apparently ineffective during heavy rains or extended wet periods.

The Lake Michigan Basin Office cooperated with the Coast Guard and the Chicago Metropolitan Sanitary District in the investigation of two oil spills. The first was a 1,000 gallon spill alongside the Cargill dock in the Calumet River. The source of this spill was not determined. The second spill occurred at Navy Pier and samples from the bilge of the suspected polluter, the Scottish motor vessel "Verdalla," will be compared with samples taken at the scene of the spill for use in possible legal action.

G. Research and Development

The Lake Erie Basin Office compiled a report listing 22 studies that could be undertaken in connection with the \$20,000,000 proposal to demonstrate new methods and techniques, and develop preliminary plans to control pollution within all or any part of the watersheds of the Great Lakes.

H. National Water Quality Laboratory - Duluth

A method has been developed to longitudinally section and scan by x-ray diffraction the cores taken from the bottom of Lake Superior during the first week of July. At present, approximately one-half of these cores have been scanned, initially only for the presence of cummingtonite, and more detailed analysis will be done subsequently. This first scan will enable us to plan the second sampling cruise and complete it before the bad weather and the fall storms begin. All core samples have been coded and the log has not yet been opened, so we do not know at the present time what distribution the cummingtonite has in the Lake.

Final plans have been made in conjunction with the Public Health Service in Cincinnati to evaluate the role of taconite tailings in the transport of bacteria in Lake Superior, and also to evaluate the increased survival of pathogenic bacteria as a result of the cold temperatures in the Lake.

Tests with the toxicity of detergents to important game fish fry have been terminated, and the northern pike appears to be one of the more sensitive of the fish tested to detergents, showing effects on growth at concentrations less than a part per million. White suckers and smallmouth bass were slightly more tolerant.

A new research team was formally appointed with the mission of developing methodology of investigating fish kills. This has been an on-going activity in addition to other duties during the past year, and it was decided to devote the full time of certain people to this important function so that better success can be expected when fish kills must be investigated. In conjunction with the activity, the staff reviewed and commented on two drafts of a proposed "Standard Methods for the Examination of Fish Kills," a document that is being prepared by Headquarter's staff.

I. Public Information

WDIO-TV, Channel 10, Duluth, ran the half-hour documentary on the Lake Superior Taconite Story for the second time on August 10th at 3 p.m.

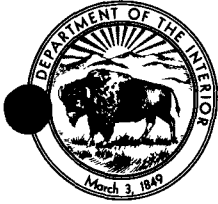
Publication of Lake Huron Basin Office's telephone number in "Action Line," a daily problem-solving column of Detroit's morning newspaper, resulted in an increase of oil pollution complaint calls. One such citizen complaint about oil and grease problems on a stream (drainage ditch) through a golf course was referred to the Michigan Bureau of Water Management, and resulted in the discovery of an industrial pollution problem which is now under investigation by the state agency.

The local NBC-TV (Cleveland) affiliate taped a half-hour public affairs show featuring the Lake Erie Basin Office Director being questioned on water pollution by a group of high school students.

III. Administrative Services

<u>Personnel Staffing</u>	<u>June 30,</u> <u>1969</u>	<u>July 31,</u> <u>1969</u>	<u>August 30,</u> <u>1969</u>
A. Total Positions	222	221	219
B. Total Personnel on Board	220	219	218
C. Total Personnel Gains	1	0	1
1. New Hires	0	0	1
2. Transfers	1	0	0
D. Total Personnel Losses	1	1	2
1. Resignations	0	1	0
2. Transfers	1	0	2

#



UNITED STATES
DEPARTMENT OF THE INTERIOR
FEDERAL WATER POLLUTION CONTROL ADMINISTRATION
GREAT LAKES REGION
33 EAST CONGRESS PARKWAY, ROOM 410
CHICAGO, ILLINOIS 60605

MEMORANDUM

August 11, 1969

TO: SEE BELOW

FROM: H. W. Poston, Regional Director *H. W. Poston*

SUBJECT: Monthly Regional Director's Report to the Commissioner

Transmitted herewith is a summary of the Great Lakes Region
activities for the month of July.

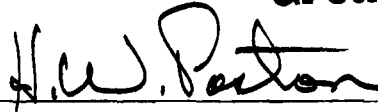
ADDRESSEES: Commissioner (2)
Deputy Commissioner (2)
Assistant Commissioners (5) Administration (9)
Regional Directors (2)
GLR Program Directors; Lab Director (1)

MONTHLY REGIONAL DIRECTOR'S REPORT

Great Lakes Region

PERIOD COVERED: July 1969

REGIONAL DIRECTOR: H. W. POSTON



I. Regional Activities

One of the most significant steps to be made by the Construction Grants Program in recent years was formally announced to all state water pollution control agencies, some 350 consulting engineers, and representatives of approximately 300 active projects. The announcement informed all of these parties that future construction grant offers will look toward a stepped-up program of project operation and maintenance. The initial steps in implementing this much needed policy will be the requirement that each project develop a tailor-made plant operating manual before the final project closeout and that all plant employees be properly trained in all plant functions and responsibilities during the initial plant start-up period. FWPCA will be able to financially participate in these activities. A visit was made to the region by headquarters personnel to discuss the possible establishment of a special squad of operation and maintenance "trouble shooters" in Cincinnati. This squad would be available upon request to the region for utilization at plants with particularly severe operating problems. The region endorses this concept so long as additional resources are made to the region to step up its own O&M program through the addition of at least one full-time person.

The National Broadcasting Company has scheduled a one-hour documentary titled, "Who Killed Lake Erie" for September 12 at 7:30 p.m., EDT. Assistance in the production of the documentary was given by members of the Lake Erie, Ontario and Huron Basin Offices.

An inspection of the personnel management program of the Great Lakes Region got underway the week of July 28, as representatives of the U. S. Civil Service Commission started a two-week visit. The inspection team is attempting to evaluate how GLR is managing its human resources, particularly at the management and supervisory levels. In addition, special emphasis is being given to reviewing the Equal Employment Opportunity, Federal Merit Promotion and Incentive Awards programs. The team is conducting personal interviews with selected employees and management officials, administering questionnaires to supervisory and non-supervisory employees, making position classification audits, studying personnel management practices and making a review of personnel records, policies and reports.

II. Individual Program Comments

Water Quality Standards

The Wisconsin Water Quality Standards Summary was reviewed by the state and returned to this office. The state's comments and suggestions are

being incorporated into the summary, which will be sent to Washington for formal review.

Comprehensive Planning

The Lake Huron Basin Planning report was sent to Washington for review and clearance. It is anticipated that this report will be released jointly by FWPCA and the State of Michigan.

H. D. Hirt attended the NIPC Technical Advisory Committee meeting for H. W. Poston. The committee reviewed plans for waste water control in Du Page County and Cook County and recommended adoption as regional plans by the Planning Commission.

Technical Services

The aquatic biologist and a field crew are working offshore of the Brookwood Nuclear Power Plant east of Rochester. Artificial substrates suspended above the rocky bottom six weeks ago are being pulled and replaced by similar units. The newly installed substrates will also be examined in six weeks. Similar surveys next year after the power plant goes into operation this fall should supply data as to the possible effect of thermal discharge on bottom dwelling organisms.

A joint effort between the University of Rochester and the Lake Ontario Basin Office to evaluate the outflow from Irondequoit Bay was undertaken with the use of the LOBO boat and the University of Rochester's instruments. The University of Rochester is presently doing a detailed study of Irondequoit Bay relative to temperature, DO, conductivity, chlorides, sulphates and light penetration.

Beach samples were collected on the Niagara and St. Lawrence Rivers in addition to several beaches on the Lake Ontario shoreline between the two rivers. A Rochester embayment beach sampling program indicates that, to this date, the beaches are cleaner than they have been for the past three years.

Messrs. Townsend and Anderson met with Soil Conservation Service representatives at the SCS area office in Batavia to discuss plans and activities for proposed studies of land runoff in selected areas. A field reconnaissance was made of three possible sites in the upper watershed area of Oak Orchard Creek for which SCS is developing work plans for watershed improvements. One site has been selected for measurement of runoff quality and volume for subsequent comparison with land use practices including crop types, fertilizer application, insecticide and herbicide usage, and terrain features. Participation by NYS Department of Health and the Agriculture Extension Service is expected.

Nine staff members participated in a preliminary survey of parts of the central portion of the Mississippi River. The purpose of this survey is to obtain chemical and hydrological data.

A 2-day meeting on the analysis of pesticides in the Great Lakes basin was held in the Lake Michigan Basin Office July 22 and 23. Attendees represented Federal, state and Canadian water pollution control agencies. The object of the meeting was to establish an on-going program in the adoption of uniform methods for pesticide analysis. Standard samples will be distributed by the Analytical Quality Control Laboratory, Cincinnati, Ohio.

The Lake Erie Basin Office Director met with the Coast Guard relative to unofficial reports that boat time assistance, so well provided by them up to now, was being suddenly cut off. The Coast Guard made the report official and offered very little encouragement for any assistance in the future. This bad news came right in the middle of limnological studies and at the most crucial time, forcing a drastic change and curtailment of the program. The Lake Ontario Basin Office offered their boat for limited studies on Lake Erie.

The second weekly cruise of the summer limnological study of the central basin of Lake Erie has been completed. Several new systems for measurement of dissolved oxygen, oxygen uptake, productivity, transparency, and bottom sediment resuspension are being tested and success is apparent.

Core samples on the bottom of Lake Superior were collected from 44 stations in four transects and at four other selected stations. The purpose of the sampling was to determine the areal distribution of taconite tailings on the bottom of the lake.

Federal Activities

Lt. Commander Cronk, U. S. Coast Guard, met with Mr. Lubratovich to discuss waterfront pollution, both present and future trends, with reference to the Duluth Harbor, the inner harbor, and St. Louis River.

A suggestion was sent to the Commander, Ninth Coast Guard District, Cleveland, Ohio, to hold a meeting in the Regional Office on August 5, with representatives of the Coast Guard and FWPCA to discuss matters of mutual concern regarding pollution abatement at Coast Guard installations and onboard Coast Guard vessels.

Information was forwarded to the Chief, Federal Activities Branch, Headquarters, regarding vessel waste pump-out stations in the Great Lakes. This information included listings for the State of Michigan and the Province of Ontario, as supplied by the state. Other information included pump-out facilities in Chicago Park District Harbors and for federal vessels located in Lake Michigan. Additional information is to be forwarded as it becomes available.

A staff member attended a meeting on July 9, called by the Metropolitan Sanitary District of Greater Chicago, to discuss pollution problems at the Glenview Naval Air Station. The station, one day before, informed the Sanitary District that they would not send a representative to the meeting. Vinton Bacon, upon learning of the station's apparent unwillingness to effect immediate pollution abatement, issued a statement,

with members of the press present, accusing the Navy of gross uncooperation and having a "go-fly-a-kite" attitude. He stated that the District would call the station to a show-cause hearing. It was later learned that emergency funds have been made available to perform the necessary remedial work.

A review was made of an application for permit by the Norfolk and Western Railway Company to dredge approximately 50,000 cubic yards of material from its slip and the Huron River Channel and turning basin at Huron, Ohio. It is proposed to dispose of all dredged material on established dumping ground in Lake Erie. Analyses of samples indicated that the bottom sediments are moderately polluted. Because of an emergency situation which developed in the area due to heavy storms on Lake Erie, and because of moderate pollutional characteristics of the bottom sediments, approval was given for a one-time operation only. It was recommended that the applicant be advised to investigate acceptable upland property or an enclosed diked area for disposal of future dredged materials.

A review was made of an application for permit by the Hanna Furnace Corporation to dredge 60,000 cubic yards of material from the Union Canal, Buffalo Harbor, and to dispose of the dredged materials on the established dumping ground in Lake Erie off Lackawanna, New York. This project is the same as one for which an application was made in April 1968, and based on results of analyses, objections were made on the granting of the permit. There is no reason to believe that the grossly polluted condition of the bottom sediments has improved, and it was recommended that the permit be denied.

Cooperative Programs

Michigan's Fiscal Year 1970 Water Pollution Control Plan was reviewed. A program summary evaluation was completed and sent to the Great Lakes Region. Missing from the plan are various implementation tables which are to be submitted at a later date.

FWPCA has often emphasized to the Corps of Engineers that serious consideration should be given to greater usage of the headwaters reservoirs for low flow augmentation, water supply and related purposes for the Twin Cities metropolitan area. Early this spring, the U. S. Forest Service requested assistance from the U. S. Army Coastal Engineering Research Center and the Corps of Engineers in determining the best solution to bank erosion problems on the headwaters reservoirs of the Mississippi River. Discussions by Messrs. Bryson and Oster with the Planning Staff of the St. Paul District Corps of Engineers about the same time, lead the Corps to expand their consideration of problems with the usage of the headwaters reservoirs. Resulting from the above, Mr. Oster participated in an inspection trip to the headwaters reservoirs, followed by a joint meeting between the Corps, U. S. Forest Service, Bureau of Sport Fisheries and Wildlife, Minnesota Conservation Department and Minnesota Pollution Control Agency, to discuss bank stabilization on the reservoirs and also water level control. The latter item is the governing factor concerning availability of water for

downstream uses. The outgrowth of the meeting is the Corps of Engineers will be doing additional computer studies on the reservoirs, experimenting with different levels and obtaining benefits applicable to each level. Comments will be solicited from all agencies concerned, regarding new operating procedures for the reservoirs.

The second progress meeting on the Twin Cities - Upper Mississippi River Enforcement Conference was held July 22. All dischargers in the conference area, with the exception of South St. Paul and Mankato, are in basic compliance with established timetables. Requests for a variance from the final completion date for constructing and operating treatment facilities were denied South St. Paul and Mankato. The largest single discharger in the area, the Minneapolis-St. Paul Sanitary District, presented a plan whereby they will meet all conference requirements by the target date, June 17, 1971. This was a complete reversal of attitude from last year when the district requested a one-year extension for submittal of preliminary plans.

All comments on Wisconsin's FY'70 program grant application have been returned to the Regional Office. Additional information to complete their application has been requested from the state. However, work continues on preparing the summary evaluation report. Illinois and Michigan have submitted their FY'70 program grant applications, and both have been routed for review and comments. A copy of the Missouri FY'70 plan was received from the Missouri Basin Region and has been sent to the Lake Michigan Basin Office for review and comments.

The Iowa CAMPS rural operation training plan has been circulated to all states in the region. Strong interest has been expressed in this program and, so far, both Michigan and Illinois have expressed interest in adopting similar programs. Follow-up meetings are planned with the states.

The Area Manpower Institutes for Development of Staff (AMIDS) instructor training course for 20 operator-instructors from 10 central states has been scheduled for August 18-22, 1969 in the Regional Office.

The "Animal Waste Disposal" conference program has been finalized. The conference will be held at the University of Wisconsin, Madison, on November 6-7, 1969.

Enforcement

Communities along southeastern Michigan's Huron River have voluntarily agreed to provide phosphorus reduction treatment ahead of the Bureau of Water Management schedule.

The Calumet Area Enforcement Conference was scheduled to reconvene on August 26, 1969 in the Illinois Room of the LaSalle Hotel. The conferees will review progress toward cleaning up the Calumet River. Besides the FWPCA, parties to the conference are the Illinois Sanitary Water Board, the Indiana Stream Pollution Control Board and the Metropolitan Sanitary District of Greater Chicago.

Mid-year status of compliance reports were prepared for the St. Louis, Clinton, Detroit, Menominee, Upper Mississippi River, Lake Erie and Lake Michigan enforcement areas. Slippage from schedules has occurred in the Lake Erie, Detroit and Upper Mississippi areas, though substantial progress is underway.

A revised Lake Superior study plan was submitted to the Commissioner. This plan outlines the total resource needs to accomplish the program in terms of scheduling, manpower and costs, and outlines the intent of each study.

A progress evaluation meeting was held in Minneapolis for the Twin Cities-Upper Mississippi River area on July 26. Six waste dischargers requested time extensions. Consideration of any extensions was postponed until further progress is indicated by the dischargers. The conferees agreed to reevaluate the requests in early 1970.

Construction Grants

Lake Erie Basin Office personnel attended a meeting held by the Ohio Basin Region regarding Cleveland's plans for a Cuyahoga Valley sewer, and the relation of Bedford Heights' upcoming STP construction to those plans. Although everyone appeared to agree that the trunk and interceptor plan is the best solution, Bedford Heights appears to be committed to building its own plant, with or without outside assistance. In attendance were representatives from the Ohio Water Development Authority, Ohio Department of Natural Resources, Ohio Department of Health, the City of Cleveland, the City of Bedford Heights, and the Regional Directors of the Ohio Basin and Great Lakes regions.

The Northeastern Illinois Planning Commission, which is the regional planning agency for the Chicago area, is considering recommending disapproval of a number of federal construction grant applications now pending with the Commission. The reason for the disapproval, if it happens, is that the projects involve only such items as treatment plant sidewalk repairs, landscaping, and related items, none of which involve the construction of conventional treatment plant units.

Congressman Dingell of Michigan is conducting a poll of all states to determine their need for additional construction grant funds. The purpose of his poll is to present to the Congress information regarding the extent of the need for grant funds on a state-by-state basis. Responses have been received by Congressman Dingell from the states of Michigan and Illinois. Both of these states stress very emphatically the need for full federal construction grant funding at the earliest possible date. As of the middle of July, responses have not been received from Wisconsin, Iowa or Minnesota.

The Solicitor's Office of the Department of the Interior has reviewed the new Michigan law implementing the state construction grant program. The law was reviewed for compatibility with the increased grant provisions of the Federal Water Pollution Control Act. The Solicitor has issued an opinion stating that the Michigan law is compatible with the FWPC Act. Of particular significance is the fact that the new Michigan law includes

a review and approval of the state priority list by the Michigan legislature before the state can issue priorities. This marks the first time that a state legislature has become involved in the approval of project priorities.

The Minneapolis-St. Paul Sanitary District formally announced at the Twin Cities Enforcement a very ambitious construction program to be completed by June of 1971. The program involves the expenditure of some \$35 million in total construction funds. It will raise the level of treatment at the plant to its highest level ever. The program is dependent upon receiving anticipated federal grant funds.

There is some indication that the Chicago Metropolitan Sanitary District may be going forward in the near future on a number of large projects that will not be covered by construction grant applications, although federal aid may well be sought later on these projects. Because of the possible non-eligibility of proceeding in this manner, the Sanitary District is being notified officially that going forward with either large or small projects without federal grant applications could end up jeopardizing ultimate federal participation because of the failure to meet applicable federal requirements.

Headquarters is currently assessing the possibility of issuing a policy on the degree of treatment that should be received during construction on sewage treatment works projects undergoing expansion. It was recommended to headquarters that the construction contractors so program their work during expansion of existing facilities so as to provide at least the same degree of treatment during construction as was provided prior to construction.

Pollution Surveillance

A meeting was held with Mr. Warren Wood, of the U. S. Geological Survey, to discuss takeover of the water pollution surveillance system stations. Letters have been sent to the station operators explaining the transfer of responsibility. Each station will be visited during the first part of August to introduce the operators to Geological Survey personnel.

A survey of Lake Huron beaches from Port Huron to Saginaw Bay indicated the following: no plankton blooms were seen; Cladophora growths seem to be smaller this year than in the past two years; the alewife dieoff reported near Lookout Point does not extend into Saginaw Bay or lower Lake Huron.

A diversion of stormwater into Lake Michigan occurred in the Calumet River as a result of the heavy storms on July 17. From three to five inches of water fell within a two-hour period over much of the Chicago area.

Residents along Lake Ontario were plagued by obnoxious odors arising from a large buildup of rotting Cladophora on the shoreline. Lake Ontario Basin Office personnel investigating complaints, found the algae piles to be as much as three feet deep.

On July 17, regional office personnel accompanied Coast Guard, Army Engineers, and State of Michigan Water Resources Commission representatives in an inspection of the SS FRANCISCO MORAZON, which has been aground near South Manitou Island since November 1960. The purpose of inspection was to check the ship for the presence of oil in its tank and if oil were found to make a study of technical feasibility for removing such oil. Court proceedings have given the owners of the ship until October 1, 1969 to remove the ship from the site.

On July 18, Mr. Richardson, on his way to attend the Governor's Conference on Thermal Pollution, caught a tank truck driver discharging approximately 800 gallons of oil onto the shoulder of I-75 near Clarkston, Michigan at 5:30 a.m. The Michigan State Police and County Sheriff were contacted, and the trucker was ticketed for littering. The material was AE3 oil, used for road surfacing. Some of the oil flowed into a drain and might have flowed into a small lake nearby; however, the Michigan Department of Natural Resources constructed a straw dike to contain the material and thereafter the oil hardened, thus negating any further threat to the lake.

National Water Quality Laboratory - Duluth

Acute toxicity tests of Dresinate-95 were made for the Lake Huron Basin Office. More sensitive aquatic life such as trout and Gammarus have a TL_m value in the range of 1 to 5 parts per million and more resistant aquatic life such as certain snails and guppies have TL_m in the 5 to 10 parts per million.

Eggs of white suckers were incubated in various copper concentrations and the fry survival and growth measured for thirty days. Twelve parts per billion had no effect on the white suckers and 37 parts per billion caused a decidedly detrimental effect on growth and survival. These values would be slightly higher in water with a greater hardness than that in Lake Superior that is about 44 parts per million (as calcium carbonate).

Temperature sensitivity tests with eggs and fry confirmed the findings of 1968 that the maximum acceptable temperature for perch egg incubation and fry survival is 18° centigrade and for white sucker eggs and fry is 21° centigrade. Findings from these studies and others indicate that temperature standards should be scrutinized closely in regard to the permissible temperatures during the spring months when spawning occurs. Since this appears to be a very sensitive period, in regard to elevated temperatures.

Public Information

"Taconite and the Lake" was shown on July 12 at 7:00 p.m., on WDIO-TV. The documentary was shown as an attempt to bring out the facts presented at the Lake Superior conference, with emphasis on the actual information that was given, unclouded by emotionalism.

Robert Bowden escorted Mrs. Goldshaw of the Goldshaw Film Enterprises and a photographer on a tour of Calumet Harbor, Calumet River, and

the Indiana Harbor Canal. Goldshaw Enterprises is making a film of water quality trouble spots in the State of Illinois.

Dr. Mount participated in the panel session held at the Holiday Inn in Duluth by the Manufacturing Chemists Association, and several of the Duluth Laboratory's technical staff attended as observers. Dr. Mount's discussion of the Lab's objectives was televised on Channel 6, at ten o'clock, p.m.

III. Administrative Services

<u>Personnel Staffing</u>	<u>May 31, 1969</u>	<u>June 30, 1969</u>	<u>July 31, 1969</u>
A. Total Positions	222	222	221
B. Total Personnel on Board	220	220	219
C. Total Personnel Gains	0	1	0
1. New Hires	0	0	0
2. Transfers	0	1	0
D. Total Personnel Losses	1	1	1
1. Resignations	1	0	1
2. Transfers	0	1	0

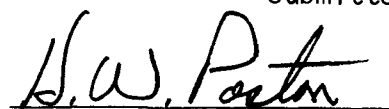
#

Period Covered: June 1969

- - - -

Submitted: July 3, 1969

REGIONAL DIRECTOR:


H. W. PostonI. REGIONAL ACTIVITIES

A two-day meeting for regional program and office directors was held June 20 in Rochester, New York at the Lake Ontario Basin Office. Theme for the meeting was "New Approaches to Water Pollution," and concerned a discussion of goals and policies, problem areas, and administration of the "Clean Water" program.

FWPCA Commissioner David D. Dominick visited the Great Lakes Regional Office June 16. The Commissioner met with Great Lakes Region program directors for a discussion of problems, saw a slide presentation of problems in the Great Lakes area, and addressed all the members of the Chicago office at an afternoon assembly. The Commissioner wound up his whirlwind tour of the Chicago office with a helicopter tour of the Calumet area. His guide was H. W. Poston. The Commissioner told the regional personnel that, "I rely on my regional staffs to pull together with me in a mutual effort to solve our nation's water pollution problems." Commissioner Dominick emphasized that there would be no major policy changes from his office at the present time. He also spoke briefly on the status of personnel ceilings, the budget, pending legislation and related matters. In response to a question, the Commissioner stressed that the FWPCA would be represented through the Department of Interior on the President's new Council on Environmental Quality, which met for the first time June 20. The following Tuesday, June 17, Commissioner Dominick spoke at the State Conference of Sanitary Engineers in Ann Arbor, Michigan. He also visited the Lake Ontario Basin Office. On the 18th, Commissioner Dominick visited the Lake Michigan Basin Office in Chicago.

II. INDIVIDUAL PROGRAM COMMENTSA. Water Quality Standards

Mr. Risley, accompanied by Dr. Philip Gustafson of the Argonne National Laboratory, attended a hearing at the Department of Natural Resources at Madison, Wisconsin on June 6. This hearing was called at the request of the Wisconsin Ecological Society relative to their concern that the criteria for nuclear power plant discharges are too lax. At the hearing, a presentation was made by Dr. Dean F. Abrahamson of the University of Minnesota Medical School. His presentation reviewed the history of the hearings in Minnesota which led to the recommendation of nuclear power plant discharge criteria for the State of Minnesota which are far more restrictive than AEC criteria. The main thrust of the argument was that the power companies agree that they can operate without difficulty within these recommended criteria. The Ecological Society requested the State of Wisconsin to consider adopting the Minnesota criteria.

The Minnesota Pollution Control Agency held a public information meeting at Red Wing, Minnesota concerning the discharge permit for non-radioactive wastes from Northern States Power Company's Prairie Island nuclear generating plant. The 1.1 million kilowatt plant is currently under construction and is scheduled to begin operation in 1972. All statements by interested citizens and groups asked for careful study before granting the permit. Many requested that a joint federal-state study group be convened to gather data. The company has stated it will meet the interstate water quality standards which have a sliding temperature scale on a 5°F rise over ambient whichever is greater with a maximum temperature of 90°F. The unresolved question is the definition of the mixing zone.

A review of proposed nuclear power plant, Monticello Unit No. 1, Northern States Power Company was completed and forwarded to the Regional Office. A great deal of controversy has resulted from the proposed operation of this plant. The Minnesota Pollution Control Agency has set radiological standards that are more strict than the Atomic Energy Commission. The AEC has informed the MPCA that the latter has no jurisdiction in setting such standards. Governor H. LeVander has stated he will back the MPCA and take the matter to the courts if necessary.

The FY'70 municipal and industrial printouts were received from Washington. The municipal printouts have been reviewed with regard to program plan information and the water quality standards information is presently being checked. The industrial printouts have been partially completed. Entering of the program plan and water quality standard information is about to begin. After correction and updating by the Regional Office, the printouts will be sent to the states for their review.

The Wisconsin Water Quality Standards Summary was given an informal review by headquarters' staff and returned to this office. It is being forwarded to the State of Wisconsin for review by the Division of Environmental Protection.

B. Comprehensive Planning

Representatives of the planning branch attended an organization meeting at Appleton, Wisconsin sponsored jointly by three local organizations in Northeastern Wisconsin. Purpose of the meeting was to develop plans for a cooperative study of water and related land resources in the Fox-Wolf River basins. It is anticipated that a requested for 3(c) planning grant money to cover part of the costs of the proposed study will be forthcoming. One announced purpose of the study is to provide local backup for the ongoing Great Lakes Basin Framework Study.

C. Technical Services

The analyses of seven dredged water and bottom sediment samples from Little Sodus and Oswego Harbor were completed for all parameters to

determine the on-site condition of the lake water and bottom environment prior to dredging.

Representatives of Niagara Mohawk Power Corporation visited the Lake Ontario Basin Office to discuss measures they are taking to correct the problem of oil leaking from their fuel handling facilities to the west slip of the Oswego Harbor. Although they are completely replacing all fuel piping and eliminating certain operations, a significant amount of oil has accumulated in the soil and seeps to the harbor. Measures for control of this seepage include a floating barrier in the slip and a series of wells from which accumulations are removed.

A biologist visited the "dried up" bed of the Niagara River just above Niagara Falls to examine bottom fauna. The Corps of Engineers have a project underway to evaluate the condition of the rock face of the falls and the removal of accumulated rock at the base of the falls.

A pesticide monitoring program has been developed for the Lake Huron Basin Office area, and assistance has been requested from the Lake Michigan Basin Office for pesticides analyses.

D. Federal Activities

Communication was received from the Ninth Coast Guard District concerning the pollution of the waters of Lake Erie by the Coast Guard Station and the Coast Guard Cutter TUPELO at Toledo, Ohio. A proposal was made about a year ago for the Coast Guard to participate in the cost of an interceptor to be built by the City of Toledo. However, the Coast Guard has pleaded inability to enter into an agreement with the City of Toledo due to lack of funds. We have requested the Coast Guard to investigate interim measures for the solution of pollution problems at these stations since they are in violation of the Lake Erie Enforcement Conference requirements and are receiving criticism from various sources. Several alternatives for interim facilities were recommended to them.

A review was made of an application for permit by the Detroit Edison Company to dredge in Lake Erie offshore their property, approximately eight miles northeast of Monroe, Michigan. It is proposed that 2,000,000 cubic yards be placed on shore and used in the construction of control dikes. The review revealed that the City of Monroe water supply intake is located approximately one mile south of the dredging site, and it was recommended that the water in the vicinity of this intake should be frequently monitored during the dredging operations, and that dredging should be stopped whenever turbulent or polluted waters drift into the intake area. It was also recommended that the polluted waters should not be discharged to the lake from behind the proposed diked enclosures. It was finally asked that these recommendations be made conditions of any permit issued.

E. Enforcement

L. Breimhurst met with R. Andrew and G. Glass of the National Water Quality Laboratory in Duluth to lay out a sampling program to determine the extent of taconite tailings deposition on the bottom of Lake Superior. Four transects will be sampled as follows:

- from Grand Marais, Minnesota to Ontonagon, Michigan;
- from Silver Bay, Minnesota to Sand Island, Wisconsin;
- from Encampment Island, Minnesota to Herbster, Wisconsin; and
- from Stony Point, Minnesota to the mouth of the Brule River in Wisconsin.

The bottom core samples will be taken from each transect equidistant apart during the first cruise, which will be the week of July 6 aboard the Bureau of Commercial Fisheries boat the "Siscowet." Two samples will also be collected off the Duluth water supply intake, one in Minnesota waters and one in Wisconsin waters. In addition to the bottom core samples a limited quantity of water samples will be collected at selected sites.

The Lake Erie Enforcement Conference, chaired by Murray Stein, reconvened on June 27 in Cleveland, Ohio. The conferees discussed municipal and industrial waste compliance schedules, Lake Erie modeling, boat pollution regulations, phosphorus control, and agricultural pollution. The following reports were completed in connection with the conference: 1) Industrial and Municipal Status of Compliance with Abatement Schedules, Lake Erie Basin, as of January 1, 1969; 2) Summary of Algal and Dissolved Oxygen Characteristics in the Central Basin of Lake Erie - Summer, 1968; 3) Lake Erie Bathing Beach and Tributary Bacterial Water Quality - June 1969; and 4) Lake Erie Water Treatment Costs Related to Water Quality.

The Lake Erie states and the federal government presented programs to remove 80% of the point source phosphorus discharged to the basin's waterways. Schedules call of phosphorus removal as follows: New York-1971, Pennsylvania-July 1972, Ohio-1973 (direct to lake) and 1975 (to tributary stream), Indiana-December 1972, Michigan-June 1977 (Detroit by 1972) and federal installations-1972. Conferees presented detailed reports of compliance with design and construction schedules as approved by the Secretary in the summary of the March 22, 1967 conference. They noted that appreciable slippage has occurred, but progress is being made.

Trash oil which accumulated on the Cuyahoga River, at the head of the navigation channel, caught fire and caused an estimated \$50,000 damage to two railroad bridges. A SITREP (Situation Report) was sent to the Regional Office via TWX. Lake Erie Basin Office staff members are continuing to investigate the incident.

A special Lake Erie beach sampling program was conducted to obtain current bacteriological data for the Lake Erie Enforcement Conference on June 27.

F. Cooperative Programs

A meeting was held with City of Cleveland representatives concerning a program for sewage treatment plant operator training. The City of Cleveland has requested federal assistance in order to carry out the program.

G. Construction Grants

Western Monroe County residents approved a \$9.7 million proposed western extension of the Northwest Quadrant Pure Waters District No. 1. Citizens in the towns of Sweden, Clarkson, Hamlin, southern Parma, north Ogden, and the villages of Brockport, Hilton and Spencerport approved the construction of an interceptor sewer to be laid through southern Parma and into southern Ogden tying in with the Spencerport treatment plant which is presently under expansion. Earlier this year, a Hilton-Brockport interceptor was approved by the County Legislature; both interceptors will eventually tie into the proposed Town of Greece treatment plant which will discharge to Lake Ontario.

During a program review session in the Regional Office with the Commissioner of the Federal Water Pollution Control Administration, he expressed his concern about the level of construction grant funding. A detailed report on the status of the construction grants program in the Great Lakes Region was presented to the Commissioner. Particular reference was made to the backlog of needs amounting to almost 2,000 projects seeking almost one-half billion dollars in Federal construction grant funds.

Several days before the scheduled withdrawal of a \$197,010 construction grant to Berrien County, Michigan, county officials visited the office in an attempt to salvage the grant through an accelerated project schedule. Pending the development of a step-by-step schedule leading up to placing the project under early construction, further action on the grant withdrawal will be withheld.

With the signing by the Governor of the \$285 million State of Michigan construction grant Implementation Act, the State Water Resources Commission has indicated that a number of projects will be certified to FWPCA for grant consideration in the fairly immediate future. It looks as if as many as 50 projects may be sent to us for review this summer. These projects will be eligible for consideration for a combined 55 per cent state-federal construction grant under the Michigan Implementation Act.

The Illinois legislature has passed and sent to the Governor a bill authorizing the Chicago Sanitary District to issue \$380 million in nonreferendum construction bonds. This is the largest bond issue in the nation to ever be authorized for a municipal entity. According to the Superintendent of the Sanitary District, the district will now build in seven years what would have taken 20 years to do under normal financing. It is estimated that the program will be rolling within a few months.

Action that had been deferred on seven Milwaukee sewer projects has now been resumed following the submission of a revised schedule for placing the Milwaukee South Shore sewage treatment plant in operation by mid 1972. The schedule was submitted as a result of a meeting last month with Milwaukee and state representatives. Prior to the meeting and receipt of the revised schedule, there were indications that Milwaukee might be developing an undue amount of slippage in completion of the South Shore secondary treatment plant. The revised schedule eliminates any undue slippage.

A schedule received from the City of Detroit in connection with its \$98 million construction grant project now being supervised by us under the possible reimbursement provisions, shows that Detroit will not meet the November 1970 schedule for placing secondary treatment facilities in operation. This schedule was originally established under the enforcement conference recommendations for Lake Erie. Acceptance of a revised schedule, which would see completion of the necessary facilities delayed by at least 1-1½ years, was presented to the federal-state conferees at the June 27 reconvened session of the Enforcement Conference. In view of the magnitude and complexity of Detroit's undertaking, the conferees raised concern, but did not recommend disapproval of the revised schedule.

According to the Wisconsin Federal Aid Coordinator, action on the implementation phase of Wisconsin's approved \$144 million state grant matching program has been deferred by the state legislature. Consideration of the implementation measures needed to get the program going will be resumed by the legislature as soon as action on other pending matters are resolved. This could be as late as August or September.

H. Pollution Surveillance

Jim Pappas of the Regional Office and Stanley Whitebloom of the Chicago Metropolitan Sanitary District accompanied R. Bowden, D. Kee and J. Slovick on a surprise surveillance inspection tour of Chicago's inland waterways. Numerous violations were noticed and are being investigated.

The weekend pollution surveillance run by FWPCA officials from the Lake Michigan Basin Office, the Great Lakes Regional Office and the Metropolitan Sanitary District led to an unusual event. Pollution control authorities had noticed a ship moored in a slip off the Sanitary and Ship Canal. The ship was recognized to be one that was involved in a pollution incident earlier. When pollution control authorities approached the ship for closer observation and started photographing it, the ship captain decided to pull out of the slip and head downstream in the canal. Later, newspapers stated the ship and its owner were being hunted by federal and state agents. It seemed the ship had disappeared from the Chicago area. An FWPCA official notified the FBI as to ship location at the time of the surveillance run. That day, the ship was located just a few miles from where pollution control authorities said they had seen it.

A final assessment of the oil spill that occurred June 16 on the Mississippi River above Lock and Dam 4 showed that approximately 64,000 gallons of No. 2

fuel oil spilled from a barge that ran aground on a wing dam. Containment and cleanup activities were not successful for various reasons. The oil was completely volatilized by June 19. There was no damage to aquatic life or wildlife.

Surveys of bottom sediments at Monroe and Bolles Harbors in Lake Erie were completed. These surveys included not only the normal grab samples which are analyzed in the laboratory, but several "reconnaissance" samples which are analyzed just for physical characteristics in the field. In this manner, a more complete picture of the sediments in a large area can be obtained.

A two-day field observation and sample collection trip on the St. Marys River was completed, just prior to dedication ceremonies for the new Poe Lock at the Soo. Mr. Elly, chemist, provided advice on analytical procedures to the operators of the surveillance station at the Sault Ste. Marie, Michigan water treatment plant.

I. National Water Quality Laboratory - Duluth

The contractor for the Lake Superior water intake line at National Water Quality Lab continues to drill and blast in the lake. There is approximately 100 feet of drilling remaining at 20 to 30' depths. The pumphouse excavation is complete and reinforcement for the floor slab is in place.

ADDENDUM

E. Enforcement

Six-month status of compliance reports for all enforcement areas within the Region are being prepared. Completion of all reports is expected in early July. Present listings of direct waste dischargers for the major conference areas include: Lake Michigan 244, Lake Erie 227, Calumet 115, Upper Mississippi River 55, and Detroit River 38.

F. Cooperative Programs

Meetings were held regarding operator training with the Metropolitan Sanitary District of Greater Chicago; the City of Cleveland; Lorain County Community College; and the Illinois State Employment Service. Other negotiations for operator training were carried on with Southern Illinois University (Edwardsville) and the City of Cedar Rapids, Iowa.

Wisconsin's FY'70 water pollution control program plan was submitted, and the Great Lakes Regional review has begun.

South Dakota's FY'70 water pollution control program plan was received from the Missouri Basin Region. It was reviewed by the Lake Superior Basin Office and comments were forwarded to the Missouri Basin Region and to headquarters.

Indiana's FY'70 water pollution control program plan was received from the Ohio Basin Region and has been forwarded to the Lake Michigan Basin Office for review.

III. ADMINISTRATIVE SERVICES

<u>Personnel Staffing</u>	<u>April 30, 1969</u>	<u>May 31, 1969</u>	<u>June 30, 1969</u>
A. Total Positions	221	222	222
B. Total Personnel on Board	221	220	220
C. Total Personnel Gains	1	0	1
1. New Hires	0	0	0
2. Transfers	1	0	1
D. Total Personnel Losses	1	1	1
1. Resignations	0	1	0
2. Transfers	1	0	1

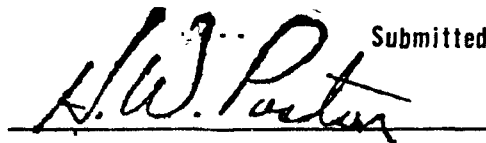
#

MONTHLY REGIONAL DIRECTOR'S REPORT GREAT LAKES REGION

Period Covered: May 1969

Submitted: June 11, 1969

REGIONAL DIRECTOR: H.W. Poston



I. Individual Program Comments

A. Water Quality Standards

Mr. Risley of the Lake Michigan Basin Office attended a meeting at the National Water Quality Laboratory with Dr. Theron O. Odlaug, University of Minnesota; Drs. Mount, Weber, Baumgartner; Dale Bryson, and other National Water Quality Laboratory staff members to plan a proposal of future studies to be conducted on Lake Superior to determine the effects of taconite disposal. A short-term (six months) and a long-term study plan were both developed. This proposal will be forwarded through the Regional Director to the Commissioner.

Mr. Breimhurst of the Upper Mississippi River-Lake Superior Basin Office attended a hearing by the Wisconsin Department of Natural Resources on the alleged pollution of the surface waters in the Black River basin. There was very little rebuttal to the conclusions of the Division of Environmental Protection, Department of Natural Resources, that local areas of pollution were occurring around municipal and industrial waste sources. The transcript of the hearing will now be reviewed by the State, and orders will be issued. Approximately 75 people attended the hearing.

FWPCA recommendations regarding the granting of a permit to National Lead Company were forwarded to the Corps of Engineers. FWPCA recommended that the company, within 3 years, provide adequate treatment or connect to a municipal system providing adequate treatment, and that planning, design, and construction of necessary facilities be completed on a time schedule satisfactory to FWPCA and the State of Missouri.

B. Comprehensive Planning

Battelle Memorial Institute of Columbus, Ohio, serving as consultants to the Ohio Water Development Authority, outlined their ideas for pollution abatement of the lower Cuyahoga River. Under the proposed system, a centralized treatment plant would be built using Southerly STP effluent, to provide processed water to the three steel mills. The proposed center also would collect waste water from the mills and clean it before dumping it back into the river. The estimated cost would be \$30 million contrasted to \$41 million if each mill were to build its own treatment plant.

Lake Erie Basin Office personnel attended a briefing held by the Cleveland office of the Federal Aviation Administration on the study status of proposed jetports in the Cleveland area. Receiving serious consideration now are two locations in Lake Erie and one near Ravenna, Ohio. One area in Lake Erie is 3-4 miles off Avon Point and the other is some 12 miles north-northwest of Cleveland. A lake jetport would be comparable in size to Pelee Island.

Research results from current laboratory experiments, both at Duluth and at Newtown, were used to prepare summaries on temperature, oxygen and pH requirements for use by the Ohio Basin Region in their discussions with ORSANCO regarding water quality standards on the Ohio River.

C. Technical Services

A biological study of the Fox River and the Fox Chain O' Lakes in Illinois and southern Wisconsin was continued. Eleven stations have been sampled. Benthic samples are collected at three points for each cross section of the stream.

Current meter study in Lake Michigan, in the heavy industry area of Calumet-Indiana Harbor, was undertaken to provide water current and wind data from a network of eleven inshore, shallow-water stations. This data is needed for calculating and predicting movement of pollutants entering the lake. Preparations, underway since December 1968 included training of personnel, acquisition and preparation of field equipment, and negotiating for the services of a suitable boat and crew. During the week of May 12, the Coast Guard buoy tender Woodbine and crew was made available to Mr. Holleyman who is in charge of this study. Technical activities branch personnel supplemented by three divers and the crew of the Woodbine, positioned the eleven stations in the lake where they will be automatically recording data until early November.

The first week of field work for the summer program to investigate the mechanics of dissolved oxygen depletion in the central basin of Lake Erie was completed with the assistance of the U. S. Coast Guard Cutter, Bramble. Dissolved oxygen concentrations as per cent saturation in the surface and hypolimnion water averaged 117% and 84%, respectively.

Each station cooperator assigned to the Lake Michigan Basin Office has been contacted to explain the transfer of Cincinnati's support effort to the basin office. Supplies have been sent to some stations and arrangements made for a new pump for the carbon filter at the Cape Girardeau station. Mr. Kee has scheduled meetings to discuss network operations with the operators.

Representatives of Bethlehem Steel visited the Upper Mississippi River-Lake Superior Basin Office to observe the automatic monitoring system. They are in the process of installing a system to measure the quality of the effluent from their plant in Buffalo, New York. They were impressed with our system and plan to incorporate much of the design of our system into theirs.

The Lake Ontario Basin Office biologist met with New York State Conservation Department fishery biologists to discuss plans for a sampling program at the Niagara Mohawk Nuclear Power Plant which is to begin operations later this year. A preliminary reconnaissance was made to determine sampling locations, the extent and type of samples required, and some artificial substrates were placed. Lake Ontario Basin Office will handle all the biological analyses except the fishery which will be the responsibility of the State Ichthyologists.

Mr. Townsend of the Lake Ontario Basin Office met with Mr. Wallace L. Anderson, State Conservationist, and three members of his staff at the New York State Office of the U. S. Soil Conservation Service in Syracuse. This was an exploratory meeting to determine how to proceed in implementing recommendations in the Lake Ontario Report relative to pollution from agriculture. Two small watersheds currently under consideration for flood prevention and other improvements, Flint Creek and Oak Orchard Creek, were suggested as potential areas for monitoring and characterizing land runoff for evaluating benefits from modifying land management practices.

D. Federal Activities

A copy of our objections (dated May 15, 1968) to a public notice concerning filling operations at Gordon Park by the City of Cleveland was forwarded to the City in response to their recent request. Recent information indicates that the City has continued to dump refuse at this location in Lake Erie for the past year without suitable permanent protective dikes as recommended by this office.

A letter was forwarded to the Commandant, Ninth Naval District, concerning pollution problems at Glenview Naval Air Station, Glenview, Illinois. The results of our recent inspection at the station were reported, and recommendations for immediate remedial action were made.

The Michigan Water Resources Commission voiced several complaints about federal installations in its statement presented at the Lake Superior Enforcement Conference. Principal complaints concerned raw sewage discharges from Coast Guard Light Stations, operational deficiencies and plant malfunctions, and the federal government's refusal to submit routine operation reports to state agencies. Recommendations on how we can solve these problems are being prepared at the Commissioner's request.

In response to our recommendations, the Esco Dredge and Fill Corporation, Erie, Pennsylvania, has agreed to deposit polluted dredged materials on upland property or in a diked area rather than in Lake Erie, as was originally planned.

A staff member made an inspection of waste disposal practices at Glenview Naval Air Station, Glenview, Illinois, in response to complaints by the Metropolitan Sanitary District of Greater Chicago. The visit revealed pollution of the West Fork of the North Branch, Chicago River from aircraft washing and fire fighting operations. This problem has persisted for ten years. A report of our findings will be transmitted to Navy personnel with recommendations for remedial action.

E. Cooperative Programs

Computer printouts which consolidate several responses in the program grant application were received. The printouts contain the extensive water quality standards implementation information, the intrastate stream industrial facility needs and the five-year list of municipal construction needs which are part of the states' water pollution control program plan. They are to be checked by this office and forwarded to the states for correction, completion and updating before they become a part of the states' Fiscal Year 1970 program plan.

Manpower needs under the CAMPS program are now being reviewed for Illinois, Ohio, Indiana, Wisconsin and Kentucky. State water pollution control agencies have been urged to obtain membership on their state CAMPS committee and Iowa and Minnesota now have such membership.

The deadline for commitment of funds for the on-the-job training program for waste treatment operators has been extended until September 30, 1969. Signed contracts have been executed with Detroit (40 trainees) and Des Moines (20 trainees) and are in negotiation with Cleveland (40 trainees), Chicago MSD (20 trainees), Southern Illinois University at Edwardsville (20 trainees) and Lorain County, Ohio (20 trainees). All five states under the Great Lakes Region training jurisdiction have been notified of the extension and encouraged to contact the cities which might use the program.

F. Enforcement

The first session of the Lake Superior Enforcement Conference was held on May 13-15, 1969 in Duluth, Minnesota. Overflow crowds were indicative of the large public interest in this conference. The report "An Appraisal of Water Pollution in the Lake Superior Basin" was the basis for the FWPCA statement to the conferees. The conference was chaired by Assistant Secretary Carl L. Klein

and Commissioner David D. Dominick. Mr. Dominick stated that after the conferees have reviewed the testimony and supplemental materials presented, the conference will be reconvened to consider the conference summary and conclusions.

Progress Evaluation Meetings have been scheduled for the Lake Erie and Upper Mississippi River Enforcement Conferences. The Lake Erie meeting will be held on June 27, 1969 at the Sheraton Cleveland Hotel. The conferees will primarily concern themselves with reports from two technical committees, detailed lists and plans for obtaining an 80 per cent reduction in phosphorus discharges to the basin; and detailed reports on the status of obtaining compliance with conference requirements and schedules. The Upper Mississippi River Meeting is scheduled for July 22, 1969 at the Holiday Inn Central in Minneapolis, Minnesota. The conferees will review progress toward abating pollution within the conference area.

The first draft of a water quality standards summary was completed and submitted to Headquarters for informal review. Summaries of the Illinois, Michigan and Minnesota water quality standards are to be prepared following the Wisconsin review.

The National Water Quality Laboratory at Duluth has been requested by the Office of Enforcement and Cooperative Programs to formulate water temperature criteria for the protection of aquatic life in Lake Michigan, and work has begun on this project. Cooperating in the effort, the Lake Michigan Basin Office has provided the National Water Quality Laboratory with temperature data collected throughout Lake Michigan.

A staff member attended a meeting on May 26 called by the New York State Health Department to discuss the May 8-9 oil spill from the Ashland Oil Refinery into the Niagara River. Others represented included the Ashland Oil Company, U. S. Army Corps of Engineers, U. S. Coast Guard, Erie and Niagara County Health Departments. The Ashland Oil Company reported that human failure was the primary cause and outlined procedures being taken to prevent a recurrence.

A meeting with Ohio Water Resources Commission was completed to discuss the observations of the Michigan Water Resources Commission and FWPCA of the oil discharge to the St. Clair River from Sarnia on April 4, 1969. Statements on the actual outfalls involved and the industry responsible were given to the OWRC for possible legal action.

G. Construction Grants

Procedures are now being developed that will result in the placing of a sign at each construction grant project announcing

the fact that FWPCA has contributed a grant to that project. Although the placing of a sign will not be mandatory at this time, each applicant will be encouraged to erect such a sign.

The possibility of a state matching program in the State of Iowa is dead for this session of the legislature. A bill proposing such a matching program, reached the floor of the Iowa House but was voted down. Attempts will be made to revive the bill when the legislature convenes next January.

Gerald Remus, head of the Detroit water and sewer system, has threatened to resign over a hike in user rates connected with the financing of Detroit's \$100 million expansion of its sewage treatment works and intercepting sewer system. The expansion project, WPC-Mich.-1387, is currently being serviced by FWPCA under the possible reimbursement provisions. A proposal recommendation by the Detroit City Council called for a boost of 60 per cent in user rates. To prevent the increase, Remus declared that he not only would resign, but would take court action if necessary.

A meeting was held in the Regional Office with officials of the Milwaukee Sewerage Commission and representatives from the state water pollution control agency to resolve a threatened delay in expanding Milwaukee's South Shore waste treatment plant. Such plant expansion to secondary and phosphate removal facilities is called for by 1972 under the Lake Michigan Enforcement Conference recommendations. Until Milwaukee officials can convince FWPCA that the 1972 date can be met, payment on seven Milwaukee projects involving approximately \$4 million in Federal grants will be withheld. As a result of the meeting, it was agreed that Milwaukee would develop a written step-by-step schedule calling for placing the necessary facilities in operation by July 1, 1972.

A compilation of construction grant projects in which industrial wastes comprise 50 per cent or more of the total waste volume has been issued by headquarters following submissions by the individual regions. Out of a total of 8,304 projects surveyed, some 384 projects or 4.62 per cent were reported to have industrial waste comprising 50 per cent of the total waste volume. The Great Lakes Region led the nation in the number of projects in this category with 134 or somewhat over 10 per cent of all projects surveyed in the Great Lakes Region. The lowest region to report was the Ohio Basin Region which reported a mere six projects or less than 1 per cent of the total project load in the Ohio Basin.

Flood damage surveys were completed on the sanitary sewerage facilities of North Mankato, Minnesota. Damage occurred to a lift station, trunk, sewers and manholes. It was determined

that repair of the damage is eligible for reimbursement under PL 875. This is the first of an anticipated 20-25 cities in Minnesota which will need these surveys as a result of the spring floods. It is anticipated that approximately 6-10 cities in Wisconsin have flood damage to their sewerage facilities.

The largest grant offer ever made in the State of Illinois--\$2,079,000--was offered to the City of Joliet. The Chicago Sanitary District has received much more in total Federal money, but never has received a grant for a single project as big as the one made to Joliet.

Two important bills cleared the Illinois House Committees. One bill provides for a \$100 million state matching grant program. Another bill provides for a \$380 million non-referendum bond issue for construction strictly within the Chicago Sanitary District. Neither bill has yet been acted upon by the Illinois Senate.

A complaint of actual and potential odors at the North Shore Sewage Treatment Plant in Lake County, Illinois, has been voiced to FWPCA, the Lake County State's Attorney, the Illinois Sanitary Water Board and to various other parties concerned with the project. This is the Sanitary District that floated a \$35 million bond issue last year to undertake a multimillion dollar improvement of its system. The first phase of the project, WPC-Ill.-754, is being administered by FWPCA under the possible reimbursement provisions. The odor complaint is being investigated.

The Minneapolis-St. Paul Sanitary District has formally complained to the Minnesota Pollution Control Agency on the state priority system for sewage treatment works construction grants. MSSD feels that the priority system is inequitable in that the Sanitary District is not getting what it considers its fair share of construction grant funds. The District is now launching a series of projects designed to improve the treatment plant over a four-year period. The estimated cost of the overall improvement program is almost \$33 million. The Sanitary District is very concerned about obtaining the necessary Federal grant funds to assist in the implementation of this program.

Over 200 construction grant applications have been received by the State of Illinois for Federal construction grant funds that will be available in Fiscal Year 1970. The priorities for consideration of such funds will be considered by the state agency shortly. The number of applicants for available funds was greatly in excess of such funds.

H. Pollution Surveillance

An oil spill on May 1, 1969, was reported by the Coast Guard to the Lake Michigan Basin Office on May 2. This was 20,000 gallons of #6 fuel oil being unloaded at the Youngstown Sheet and Tube Company. The spill was caused accidentally by a barge collision with the barge being unloaded at the dock.

Oil on the beaches at Oscoda, Michigan was investigated by the Lake Huron Basin Office and found to consist of one-to-three inch globules of heavy black oil mixed with sand, scattered along the beach for a distance of ten miles. This appeared to be an oil spill several days old that washed onto the beach as a result of easterly winds. No source was identified and damage consists mostly of the nuisance to residents of the area.

Lake Michigan beaches are being sampled at 8 points from Rainbow Beach at 75th Street in Chicago, to the East Chicago, Indiana public beach. In addition, the Hammond beach on Wolf Lake will be sampled. The beaches will be sampled each Tuesday and Thursday during the swimming season. This program is coordinated with the state beach sampling programs of Illinois and Indiana who sample too but on different days each week.

A review of oil pollution incidents by the Lake Michigan Basin Office has revealed that the majority are caused by pipeline breaks, accidents or carelessness.

Samples from the Barge Canal and Tonawanda Creek in the Buffalo area were submitted for lab analyses. Five samples from different mileage points on the Genesee River and eight samples from the Black-St. Lawrence Rivers, all a part of the surveillance program, are currently being analyzed for all parameters. Work is also continuing on the analyses of Lake Cruise samples taken last August.

The Lake Huron Beach Observation was completed. No serious problems with alewives or algae were noted. Algal growths appear to be less profuse this year, possibly because of higher water levels in the lakes.

Flood damage surveys were conducted on the following Wisconsin communities: Prescott, Fountain City, Alma, Menomonie and Hudson. Mr. Oster of the UMR-Lake Superior Basin Office and Mr. Sam Castagna of the Wisconsin Department of Natural Resources, Eau Claire office, made the Federal-State team to investigate the damages for the Office of Emergency Preparedness. This completes surveys needed for Wisconsin cities above La Crosse. Follow-up surveys will be needed for four Wisconsin communities below La Crosse. Investigations thus far in Wisconsin have shown minimal damage to sanitary sewerage facilities. Five cities remain to be inspected in

Minnesota. These will be investigated within the next two to three weeks.

The automatic water quality monitor located on the lower Minnesota River has been placed back in service and the system is once again completely operational. The monitor site was under 14 feet of water for approximately two weeks. Minor site repairs were necessary before reinstallation. Data collected during the period of the spring floods at another monitor site indicated that the physical and chemical quality of the river downstream of the Minneapolis-St. Paul Sanitary District was not significantly lowered as a result of the bypassing of the District's waste treatment plant. Microbiological data was not collected during this period.

I. Research and Development

Research and Development, Great Lakes Region, has granted Burgess and Niple, Consulting Engineers, an extension to 16 months on contract number 14-12-401, "An Investigation of Storm and Combined Sewer Pollution at Bucyrus, Ohio." The contractor requested this extension to allow for an evaluation of overflows during dry weather flow conditions.

J. National Water Quality Laboratory - Duluth

Substantial effort was devoted this month to preparation of information for the Lake Superior Enforcement Conference that began on May 13, 1969. Many of the experiments designed to demonstrate biological effects of taconite did not provide conclusive evidence in either direction. It was found through neutron activation analyses that both iron and chromium are taken up by fish exposed to the less than 2 micron particle size fraction of taconite tailings, during 24-hour exposures. The same size fraction of taconite at concentrations of only a few parts per million remarkably promoted growth of bacteria at a typical Lake Superior temperature of 4°C. Taconite also provides a source of food for bacteria when added to distilled water.

Eggs of rainbow trout, walleye and northern pike are being exposed for thirty days to various copper concentrations. This will provide the first information on safe copper concentrations for walleyes and northern pike.

The exposures of northern pike eggs to various temperatures during incubation and hatching have been completed and the results confirm those obtained in 1968. Eggs hatched successfully at temperatures between 6 and 18°C.

The two-year exposure of brown bullheads to copper is now beginning to provide results as the bullheads have begun to spawn. Bullheads are known to be very sensitive to copper, and this will provide the first information on safe concentrations of copper for spawning in catfish.

Fish are being moved from Duluth to Bayport in preparation for the next experimental run. All systems are functioning normally at the field site after the spring flood.

II. Administrative Services

<u>Personnel Staffing</u>	<u>March 31,</u> <u>1969</u>	<u>April 30,</u> <u>1969</u>	<u>May 31,</u> <u>1969</u>
A. Total Positions	221	221	222
B. Total Personnel on Board	221	221	220
C. Total Personnel Gains	2	1	0
1. New Hires	2	0	0
2. Transfers	0	1	0
D. Total Personnel Losses	1	1	1
1. Resignations	1	0	1
2. Transfers	0	1	0

#

MONTHLY REGIONAL DIRECTOR'S REPORT GREAT LAKES REGION

Period Covered: APRIL 1969

Submitted: May 8, 1969

REGIONAL DIRECTOR: *for* H. W. Poston *R. J. Schneider*

I. Regional Activities

The Multiagency Contingency Plan for Pollutional Spills in the Great Lakes Region has been completed and forwarded to the Commissioner. Copies of the plan were also forwarded to Regional Operation Team Members and Basin Office Directors. The plan provides a basis for coordination and direction of Federal, State, and local response systems and encourages the development of local governments and private capabilities to minimize the effects of spills of oil or other hazardous material.

The checklist to be used for review of maintenance and operation procedures at Federal installation waste treatment facilities was completed. This checklist will be submitted to the Regional Program Coordinators of all regions and to headquarters for their review and comments. It is now being used on a trial basis in connection with the site visits in the Great Lakes Region.

II. Individual Programs

Water Quality Standards

1. The Minnesota Pollution Control Agency conducted hearings on requests for variances from established time schedules and from water quality effluent standards and river standards in the Twin Cities metropolitan area. Companies or municipalities requesting variances included: Armour and Company, Swift and Company, St. Paul Union Stock Yards, South St. Paul, Minnesota Mining and Manufacturing Company - Chemolite Plant, Northwestern Refining Company, Shakopee, American Crystal Sugar, St. Peter, Mankato and a proposed mobile home park near Anoka. Cities and industries requesting extensions of time include: South St. Paul (1 year), Shakopee (18 months), Northwestern Refining Company (6 months), Mankato (15 months) and St. Paul Union Stock Yards (1 year). A report on the hearing will be submitted to the Regional Office.

Comprehensive Planning

1. The Minneapolis-St. Paul Metropolitan Council is gathering information for a preliminary concept plan for a major river corridor study. In conjunction with this study they are performing a water use information survey which will consolidate and evaluate known information relating to water

use, describing the status of data collection and a summary of conditions, trends and recommendations. The survey will also provide an evaluation of needed studies to provide additional basis for development policy. In connection with this survey staff members of the Metropolitan Council visited this office to obtain information from our files on various uses of water such as water supply, waste disposal, flood control, navigation, hydroelectric, recreation, fish and wildlife, and climate. Information available on the above subjects, plus information on our program will be sent to them in the near future. We will be given an opportunity to review portions of the report concerning our input, prior to publication.

2. A final rough draft of the Lake Huron Comprehensive Report has been sent to the Michigan Water Resources Commission and Great Lakes Region Office for review and comment.

Technical Services

1. Arrangements have been completed for the use of a Coast Guard boat to install current meter stations. Installation of instruments was scheduled to begin April 28.

Federal Activities

1. Harbor sediment surveys were made at Waukegan, Illinois; Sheboygan, Wisconsin; Manitowoc, Wisconsin and Two Rivers, Wisconsin. Each of these harbors are to be dredged by the Corps of Engineers in the near future. Reports on the condition of the bottom sediments in all areas of each harbor that are included in the Corps of Engineers dredging projects will be prepared.
2. The Illinois Sanitary Water Board was advised by letter of proposed revisions in chlorination facilities at Chanute Air Force Base, Illinois. Revisions were recommended by the North Central Division, Corps of Engineers, and concurred in by this office that it would be unnecessary to install two chlorination facilities, including buildings when the required chlorination could be effected satisfactorily with a single installation at a saving of about \$70,000 to the government.
3. An inquiry was received from headquarters regarding a complaint that had been received in the office of Senator Hart (Mich.) from a Conservation association regarding pollution of the Jordan River by Jordan River National Fish Hatchery. It was reported to headquarters that a survey had been made in January of this year by the Lake

Michigan Basin Office and a report issued in February 1969. The recommendations in this report were that another survey should be made during the period of high waste discharges during spawning season and that the Bureau of Sport Fisheries and Wildlife submit a project to install a settling basin or lagoon to settle out solids. The Lake Michigan Basin Office has conducted a second survey and analyses are being run, and a report is expected in about two weeks. The Bureau of Sport Fisheries and Wildlife also informed this office that a preliminary project proposal has been prepared and that it will be submitted to this office for review in May 1969. This project is proposed to be funded in FY 1971.

4. A review was made of an application for permit by the Erie-Lackawanna Railway Company to dredge approximately 1,500 cu. yds. of material at its dock in Old River at Cleveland, Ohio and to dispose of the dredgings in the authorized dumping ground in Lake Erie. Samples were collected at two points by the Lake Erie Basin Office, and analyses were conducted in the usual manner. Results of chemical and biological analyses revealed gross pollution at one sampling station and moderate pollution at the other. It was recommended that the Federal permit not be issued for the proposed project unless provision is made to deposit dredged materials in a suitable enclosed area on upland property or in a water area enclosed by a relatively impermeable dike. The recommendation was forwarded to the Regional Coordinator, Ohio River-Appalachian Area for transmittal of a departmental statement to the Corps of Engineers.
5. Information was received from the Corps of Engineers that the National Lead Company has made an official request for a two-weeks' extension of time beyond the deadline of April 11, 1969 in order to complete their analyses of the FWPCA report. This office offered no objection to the requested extension of time.
6. A review was made of an application for permit by Sinclair Oil Corporation to construct marine docking facilities in Grand Traverse Bay near Traverse City, Michigan. No objection was made to the granting of the permit, but it was stated that the possibility of spills during loading and unloading operations which could cause pollution of Grand Traverse Bay were of concern to us. It was recommended that the applicant provide assurance regarding precautions to eliminate any spills, and further that a description in writing of protective devices be furnished to the Corps of Engineers, with a copy to this office.
7. H. A. Anderson of the Lake Ontario Basin Office attended the public meeting for discussion of the report on "Dredging

and Water Quality Problems in the Great Lakes" held at Buffalo, New York on Tuesday, April 29. Of the seven individuals presenting statements, four definitely favored discontinuing the deposition of dredgings into the lake. Joseph J. Dunn, representing the Commissioner of Public Works of the City of Rochester reported that they believed the improved municipal waste treatment would reduce pollution of the sediments dredged in the Rochester area so as to permit their deposition in the lake. David DeHaven, representing the Conservation Clubs of Pennsylvania objected to the dike disposal sites proposed at Erie, Pennsylvania. Mr. Stone of the New York State Conservation Department objected to the proposed dike disposal sites at Rochester, New York.

Cooperative Programs

1. The Regional Office was represented at the Regional Coordinating CAMPS Committee meeting in Chicago on April 9-10. The Regional Manpower Development and Training Officer will be on a subcommittee to review the State of Michigan CAMPS plan for Fiscal Year 1970.
2. Visits were made to Madison, Wisconsin and Minneapolis, Minnesota to discuss with State officials the national on-the job training contract for waste treatment operators and the CAMPS program. This completes the initial round of orientation visits to the capitols of Illinois, Michigan, Iowa, Wisconsin and Minnesota, begun in January.
3. On-the-job training contracts are in progress in Des Moines, Iowa; Cleveland, Ohio; Detroit, Michigan; and Chicago, Illinois. Funds must be committed by July 18, 1969 to these training courses unless FWPCA is successful in obtaining an extension in time from Labor and HEW.
4. A site visit to the University of Wisconsin was made with a 5-man inspection team. Five FWPCA graduate professional training programs were examined. Students expressed some difficulty in getting responses from FWPCA, Washington on available professional openings.
5. The State of Wisconsin has requested assistance in putting on a conference on dairy farm animal waste management. Arrangements for the conference have begun, and a date will be set pending the availability of speakers. The Regional Training Officer will be the coordinator of this conference.
6. A suggested list of six one-day professional level symposia has been formulated based upon top Regional Office personnel

preferences. These would be held in various Great Lakes basins where the specific problem is most urgent.

7. The Great Lakes States Governors' Conference on Pesticides was held in Chicago on April 20. The governors recommended that the monitoring program developed by the pesticide committee of the Lake Michigan Enforcement Conference be immediately and fully implemented, and they requested that the Federal government provide \$200,000 to supplement the monitoring programs currently underway by the states.
8. A meeting was held on April 20 following the governors' conference attended by Ray Johnson and Dr. John Carr of the Bureau of Commercial Fisheries and Dr. Mount, Vic Lambeau and Clifford Risley, FWPCA. The pesticide monitoring program was reviewed in light of recent developments. It was suggested that FWPCA develop an expanded pesticide program and that the Four-State Pesticide Committee be reconvened on May 9 to review the proposed program.
9. Dr. Mount of the National Water Quality Laboratory attended the Governors' Conference in Chicago on Sunday and served as a resource person to Assistant Secretary Klein. Arrangements have been completed to reconvene the Lake Michigan Enforcement Conference Pesticide Committee on May 8 in Chicago to reconsider the recommended program in light of recent seizures of coho salmon due to pesticide content.
10. Commissioner Dominick spoke at the first annual Monroe County Pure Waters luncheon held at the Rochester Chamber of Commerce building. Following the luncheon program he visited the Basin Office. The staff presented a review of progress, accomplishments and future activities. A tour of the facilities concluded his visit.
11. A meeting was held with Cleveland city officials relative to the construction of Interstate Route I-90. Cleveland wants to dispose of the excavations in Lake Erie, by using them to build up their sand-starved beaches.
12. Copies of correspondence were received from Mr. Howard B. Schulman to Congressman William E. Minshall, regarding request for advice on proposed dumping of excavated materials into the waters of Lake Erie from a high rise apartment building at Lakewood, Ohio. This request was referred to the Lake Erie Basin Office in a letter from the Deputy Commissioner to the Congressman. As a result, a conference was arranged to be held in Cleveland, Ohio on May 2 to discuss this matter with Mr. Schulman. Representatives of the Bureau of Outdoor Recreation and the Bureau of Sport Fisheries and Wildlife,

and the Regional Coordinator will be present at this meeting. Following the conference, a report will be submitted to Congressman Minshall.

13. The Minnesota Pollution Control Agency held a hearing on an application by Northern States Power Company for a permit to discharge wastes to the Mississippi River from its new nuclear generating plant near Monticello, Minnesota. The hearing lasted two days and approximately 300 people were in attendance. A very restrictive permit was drafted by Dr. Ernest Tsivoglou, consultant to the Agency. The limitations contained in the permit are 98 per cent lower than those established by the Atomic Energy Commission and the International Council on Radiation Protection. Statements were made by Minnesota Congressional Representatives Karth and Fraser of St. Paul, and Minneapolis, respectively, Mayor Naftalin of Minneapolis, 15 legislative representatives from the Twin Cities area, the City Council of St. Paul, as well as numerous conservation groups and private citizens. Without exception all were opposed to the granting of the permit and requested that the Agency require the plant to be operated as a completely closed system with no discharge of radioactivity material to the water or air environment. By a split 4 to 3 vote, the Agency withheld action on the permit for a period of one month in order to permit one of its members to submit a list of 400-500 questions to the Agency's consultant.
14. Robert M. Buckley of the Lake Huron Basin Office and Mr. George Groft, PhD, Michigan State Chamber of Commerce, participated in a panel discussion on the impact of the \$335 million Clean Water Bond Issue at a meeting of the Southern Wayne County Chamber of Commerce.
15. The Minnesota Pollution Control Agency held a hearing on the application by the North Suburban Sanitary Sewer District, for a permit to discharge treated effluent to the Mississippi River one mile downstream of the Minneapolis water intake. The City of Minneapolis and the Metropolitan Council spoke against the granting of the permit. The Agency continued the hearing to April 18.

Enforcement

1. The three steel companies on the Cuyahoga River are now dumping their dredgings within the diked enclosure in the Cleveland Harbor.
2. Final preparations were made for the Lake Superior Enforcement Conference. The FWPCA report, "An Appraisal of Water Pollution in the Lake Superior Basin," was given final review and turned

over to the printer. Plans for the FWPCA presentation at the conference were completed and a final review scheduled. Requests have been received from a number of private citizens and conservation and other civic organizations to participate in the conference.

3. It has been recommended that the Lake Erie and Upper Mississippi River enforcement conferences meet to consider progress in implementing the recommendations issued by the Secretary.
4. A summary statement on progress at the Lake Michigan Enforcement Conference was prepared for the Regional Director for presentation at the Open Lands Project Four-States Conference on Lake Michigan held in Chicago on April 12.
5. An informal progress report on Federal enforcement actions on Lake Michigan and the Calumet area was presented to the Chicago Engineers Club in Chicago on April 16.
6. The Iowa Standards-Setting Conference was convened in Davenport on April 8-9 and in Council Bluffs on April 15. The conference was called with particular reference to treatment requirements and implementation plans on the Mississippi and Missouri Rivers, temperature requirements on interior streams and disinfection. In addition to Iowa and Federal agency statements, other States, municipalities, industries and interest groups appeared as parties to the conference. The record of the conference has been forwarded to the conference chairman.

Construction Grants

1. The Minnesota State Senate Civil Administration Committee unanimously approved the Metropolitan Council's sewer bill, enhancing the chances for the bill to become law. The bill creates a seven-member board appointed by the council to run a regional sewage system in the Twin Cities area. A bill of this type has never before been voted on in the full Senate. In the two previous legislative sessions, the House passed a metropolitan sewer bill, and in all likelihood will pass the present one.
2. The Michigan House has once again deferred final action on the \$285 million State bond implementation law already passed by the Senate. It appears that action is imminent by the House. Such action will result in the certification of 30-40 projects to FWPCA for obligation of FY 1969 construction grant funds. No project will be certified unless it is in a state of "readiness-to-go."
3. The state matching program in Iowa will be considered by the Iowa legislature within the next few days. Chances of passage

of a \$4 million state matching appropriation is considered highly uncertain at this point. If the bill is not passed during this session of the legislature, indications are that it will be one of the first items to be considered at next year's session of the legislature.

4. Minnesota expects to send sufficient projects to the Regional Office shortly to encumber all unobligated grant funds. This action would make Minnesota the first State in our region to obligate all of this year's construction grant funds.
5. A \$49,740 grant offer to Morristown, Minnesota has been withdrawn because of the community's inability to finance the project without financing help from FHA. If our agency had been aware of the need for FHA financing at the time of making our grant offer on March 3, the grant offer would not have been made at all by our agency.
6. A freeze on grant offers and grant payments to sewer and sanitary districts located in the State of Wisconsin has been imposed until further notice. The purpose of the freeze is to determine the affect of a recent Wisconsin Supreme Court decision on the unconstitutionality of Wisconsin's sewer districts. When this affect is determined, the freeze will be dropped.
7. There was a flurry of activity, telephone calls and other communications on the constitutionality of State statutes for establishing metropolitan sewer districts in the State of Wisconsin as a result of several inquiries from an individual living within the Western Racine County Metropolitan Sewer District. The individual alleges that the State statutes are unconstitutional and the State agency advises that the State Supreme Court decision, upon which the allegation is based, pertains only to the establishment of a Fond du Lac MSD. Headquarters has advised that processing of grant applications to sewer districts in Wisconsin should be suspended pending clarification on the constitutionality of the State statutes. A copy of the Supreme Court decision on the Fond du Lac matter was received and transmitted to headquarters for appropriate review by the Solicitor's office.
8. The City of Red Wing, Minnesota construction grant application for waste treatment facilities to serve the S. B. Foot Tanning Company in Red Wing, the identical project for which an R & D grant was made previously, was disapproved. The disapproval was based on the fact that the experimental and nonexperimental portions of the project are inseparable and that such inseparable identical facilities cannot simultaneously be financially

supported under both the R & D and Construction Grant Sections of the Federal Water Pollution Control Act.

9. The Chicago Sanitary District has gone to the State legislature to seek approval of a \$380 million bond issue to abate water pollution and stop flooding in the Chicago area. If the legislature grants its approval, a voter referendum will not be required within the district. Unless the Sanitary District can come up with some additional financing through this or other techniques, it will be unable to let any more construction contracts until next September. The final Federal grant funds available to the District from this year's appropriation--\$211,675--were made to the District.
10. Kenneth Voight has been designated to participate in a Federal aid panel at a meeting of the Northeastern Wisconsin Planning Commission. The meeting, scheduled for May 6 in Neenah, will cover a variety of topics in addition to Federal aid. Attendance in the neighborhood of 200 municipal officials, consulting engineers and others is expected.
11. A resolution has been received from the City of Duluth, Minnesota expressing that community's willingness to undertake construction of secondary treatment facilities, or tertiary if required, to satisfy the Federal-State water quality standards for Lake Superior. Up until the receipt of this resolution, there had been no firm assurance from the City of Duluth that it would make a commitment to raise the level of its treatment beyond the existing primary treatment. The action by Duluth constitutes a significant advance in the Lake Superior Basin inasmuch as Duluth is by far the largest community discharging directly into Lake Superior.
12. An inquiry was received from Mr. Ray Leary, Chief Engineer and General Manager of the Milwaukee Sewerage Commission, regarding Milwaukee's difficulties in complying with a special condition contained in the last seven construction grant offers made to Milwaukee. This condition stipulates that no payment will be made on any of the grants until FWPCA has assessed Milwaukee's progress toward providing adequate treatment facilities at the South Shore Waste Water Treatment Plant in accordance with a schedule that Mr. Leary provided on February 13, 1968, requiring completion of the facilities in 1971. Milwaukee was advised that the present 1971 date governs although cognizance would be taken of subsequent deadlines established by the Lake Michigan Enforcement Conference. A report on steps to be taken to insure that Milwaukee is meeting all deadlines has been requested.
13. The State of Wisconsin passed an advisory referendum for a proposed \$144 million State construction grant bond issue. The State legislature must now take action to enact enabling

legislation to make the bond issue effective. It is expected that this action by the legislature will take several months. Enactment of the bond issue will provide State aid to an estimated 476 potential sewage treatment works projects and will result in pre-financing a segment of the Federal grant share until more Federal funds become available.

14. Last November, the Illinois billion dollar natural resources bond issue was defeated at the polls. It was expected that a new bill would be introduced upon convening of the 1969 legislature. Such a bill, Senate Bill 98, has now been introduced. The bill is similar to the provisions contained in the defeated billion dollar bond issue. Public hearings on the bill began on April 14 in Springfield and FWPCA presentation was made at that time.

Pollution Surveillance

1. An oil emergency occurred in the Detroit River on April 22. About 96,000 gallons of waste products consisting of oil and soapy materials were discharged from a Chrysler Corporation lagoon into the Trenton Channel. The spill was first detected by Michigan Water Resources Commission personnel who then notified the Lake Huron Basin Office. Marine Pollution Control, a private firm, was requested by the Lake Huron Basin Office to contact Chrysler for authorization for cleanup. The Coast Guard, Corps of Engineers, and Ontario Water Resources Commission were notified and joint efforts were devoted to collecting samples and tracking the material as it flowed into Lake Erie. Within 24 hours the material had dispersed into the water leaving no evidence of any oil slick on the surface. Thus no further threat to wildlife remained. Coast Guard aerial surveillance of the affected area in Lake Erie 24 and 48 hours after spill revealed discolored patches of water within an area of 3 miles below the Detroit Light, 2 miles southeast of Stony Point, 2-3 miles east of Monroe Harbor extending about 8-10 miles in an easterly direction into the lake. They reported as of about noon, April 24, that the discoloration was dissipating rapidly.
2. The Mississippi and Minnesota Rivers in Minnesota crested during the past week and are slowly receding. In both basins the river levels were only slightly below the record level set in 1965. However, damage has been considerably less than the 1965 level because of preparations made by the U. S. Army Corps of Engineers and municipalities. An unusual phenomena occurred along the Minnesota River in that the river crested simultaneously at all points.

3. The site of the automatic water quality monitor on the Minnesota River is currently under 14 feet of water. The other two monitors located on the Mississippi River upstream and downstream of the Twin Cities metropolitan area continue to function and are transmitting data.
4. The organic chemistry laboratory initiated analysis on pesticide samples from Lake Michigan collected at City of Chicago water intakes. This activity is part of a coordinated activity for pesticide surveillance in Lake Michigan in cooperation with the Bureau of Commercial Fisheries. The Bureau of Commercial Fisheries will collect samples in the spring and in the fall.
5. The Coast Guard patrol observed a discoloration on the Des Plaines River, in Joliet, Illinois, on April 21 and made an inspection. The spilled substance was ink from Olin Kraft, Incorporated. Samples and color photos were obtained. Gary Harmon, State of Illinois, was notified and he is following up on the sample results. Olin Kraft has been under violation orders and may be vigorously prosecuted.
6. An oil spill was reported by the Michigan Water Resources Commission on the St. Clair River, originating from the Sarnia, Ontario oil processing area, and extending downstream as far as the North Channel. Other agencies, including the Ontario Water Resources Commission, were contacted, and Lake Huron Basin Office personnel accompanied the Michigan Water Resources Commission on a helicopter reconnaissance of the area. This is similar to materials previously spilled from the same area. It is a light substance, probably consisting mostly of latex, and does not usually cause damage that would be associated with heavy petroleum products.
7. An equipment failure occurred Wednesday, April 30, about 4:30 p.m., at the Sherwin-Williams Plant in Cleveland, Ohio. Some 200 gallons of cobalt paint drier were discharged to the Cuyahoga River. The company took steps to mitigate the spill's effects. The Lake Erie Basin Office was alerted and the Director dispatched a program advisor to investigate the incident.
8. Messrs. Bryson, Breimhurst and Oster visited the Minneapolis-St. Paul Sanitary District plant to observe the flood preparations taken by the District. The plant was being placed back in operation at the time of the visit. The preparations taken were well planned and it appears that very little actual damage occurred.
9. An oil spill occurred at Brewerton on Oneida Lake. Presently, the New York State Department of Health and Conservation have

legal actions against one of the companies. The company has been party to minor spills during the past several years. Lake Ontario Basin Office personnel investigated the spill.

10. A Lake Ontario Basin Office staff engineer attended a meeting called by the Coast Guard on a local contingency plan for Oswego. A local committee chaired by the civilian defense chief and composed of the fire chief and two men from industry with the Coast Guard and State Health Department personnel as advisory members was formed. The first task of the committee will be to purchase 1,000 feet of boom. Storage will be in the Port Authority Building. The City of Oswego and at least three industries have committed funds toward the purchase. The cooperative effort resulted from a recent oil spill.
11. The current status of oil accumulation on Buffalo area waters was investigated. The Black Rock Channel is unusually free of heavy floating oil slicks. In many previous years a significant accumulation of oil has occurred during this period of the year at this location. The Inner and Outer Buffalo Harbor was also free of ice and oil. On March 2, high flow in the Buffalo River was flushing out the existing accumulations of oil and debris. These were flowing down along the U. S. shore of the Upper Niagara. The quantity of oil was probably not great enough to create the serious conditions in the Lower Niagara which have occurred at times in the past.

Research and Development

1. Twenty-eight Research and Development grant applications were reviewed. Research and Development was visited by prospective applicants on eight different occasions during the month. Approximately twenty application packets were requested by interested citizens.
2. Drs. Berlie Schmidt and Faz Haghiri of Lake Erie Basin Office met with two members of the staff to discuss the possibility of an R & D grant for a project to study control of agricultural runoff. The project would be based at the Ohio Agricultural Research and Development Center, Wooster, Ohio.

National Water Quality Laboratory - Duluth

1. Blasting operations and removal of rock began in the pump station area for the raw water intake at the National Water Quality Laboratory in Duluth. Drilling of the trench was completed on land to the lake shore and drilling was begun within the lake area to approximately Station 2+10 South.

2. Mr. Lubratovich of National Water Quality Laboratory, Duluth traveled to Monticello on April 9 to meet with Mr. Norris Fitch, Mr. Peterson, and Mr. Bohn, Engineers of Northern States Power Company to determine the best possible method of installing pumping units for the hot water supply to the pond area, and reviewed area of discharge into the east cooling tower. Mr. Lubratovich will design a method of placement of pump, location and discharge piping to be approved by Northern States Power Company.

International Program

The Chief, Technical Activities Branch, attended a public hearing on New York's proposed rules and regulations for oil and gas well drilling in Lake Erie. Most participants were opposed to drilling. A few industrial representatives were for it, particularly Canadian interests.

Public Information

The Deputy Regional Director was the featured speaker at the regular monthly meeting of the Great Lakes Chapter of the Sierra Club on April 2. Officials of the Chapter indicated that they will be re-orienting their conservation efforts in this area to pay particular attention to the pollution problems of the Great Lakes. The FWPCA's program in the Great Lakes, with particular emphasis on Lake Michigan, was described. The discussion was illustrated with color slides.

III. Administrative Services

<u>Personnel Staffing</u>	<u>February 28, 1969</u>	<u>March 31, 1969</u>	<u>April 30, 1969</u>
A. Total Positions	223	221	221
B. Total Personnel on Board	220	221	221
C. Total Personnel Gains	3	2	1
1. New Hires	2	2	0
2. Transfers	1	0	1
D. Total Personnel Losses	1	1	1
1. Resignations	1	1	0
2. Transfers	0	0	1

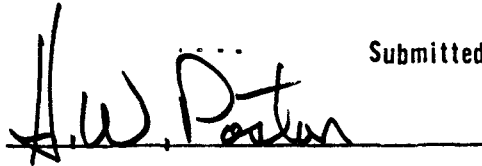
#

MONTHLY REGIONAL DIRECTOR'S REPORT - - - - GREAT LAKES REGION

Period Covered: March 1969

Submitted: April 11, 1969

REGIONAL DIRECTOR: H.W. Poston



I. Regional Activities

1. Three staff members of the Lake Huron Basin Office attended a meeting at the U. S. Geological Survey office in Lansing to discuss the possibilities of transferring certain water quality monitoring functions currently performed by the FWPCA to the USGS.
2. Discussions with the Department of Interior Coordinators have resulted in somewhat revised procedures for the handling of comments and correspondence to the District Engineers. FWPCA is to act as the coordinating agency for all Interior Bureaus, and, in one case, is to prepare a departmental letter on the Regional Coordinator's letterhead for transmittal to the Coordinator for his signature. In the other case, FWPCA is again to prepare the Departmental letter on the Coordinator's letterhead, is to sign same letter for the Coordinator and send it directly to the Corps of Engineers, with a copy to the Coordinator.
3. A request was sent to each of the Basin Offices in the Great Lakes Region to review and comment on proposed criteria for determining acceptability of dumping dredged sediments in the open waters of the Great Lakes. It is hoped that uniform criteria will be established so that such information submitted by the Basin Offices will contain analysis of the same parameters and units used for reporting will be uniform. It is believed that this will be helpful because of the several District Offices of Corps of Engineers to whom we report.

II. Individual Program Comments

1. Water Quality Standards

Final preparations began for the Iowa Water Quality Standards Conference scheduled for April 8, 1969 in Davenport, Iowa. It is the first conference to be called for the purpose of establishing water quality standards. The Davenport conference will be concerned with the Interstate waters of Iowa which drain into the Mississippi River. A similar conference will be held in Council Bluffs later in April. The main disagreement between the federal government and Iowa is over secondary treatment of sewage going into the Mississippi River. Frank Hall, Director, Enforcement and Cooperative Programs, Great Lakes Regional Office, will present the FWPCA case.

A meeting was held with the Minnesota Pollution Control Agency to resolve the definition of a "trace" as used for certain parameters in the interstate water quality standards. They are legally bound

to utilize the available technology at the time the standards were proposed, i.e., 1965. The Agency does not plan in the near future to update the definition to reflect current analytical technology.

A draft of the Lake Superior report for the upcoming enforcement conference was completed.

The Minnesota Pollution Control Agency formally adopted intrastate water quality standards and statewide effluent standards at their March meeting. The interstate water quality standards were also officially adopted, however, Findings of Fact, Conclusion, and Orders of Determination were not completed yet so it will be necessary for the Agency to re-adopt the standards upon completion of these items. Mr. Robert Burd, Deputy Assistant Commissioner, Office of Operations met with the Agency to discuss the interstate standards.

L. E. Townsend attended the second of four hearings on temperature criteria being conducted by the New York State Department of Health for the Water Resources Commission. The Commission has announced proposed numerical criteria which are intended to define official State standards that are in general terms. Industries and power companies have indicated much displeasure with the criteria claiming the limits are excessively conservative and restrictive. The general opinion is that the criteria, if adopted as proposed, will be very helpful in effectively administering thermal pollution control.

2. Comprehensive Planning

Final organization of Federal, state, and local government agencies was accomplished at a Natural Disaster meeting in Madison, Wisconsin on March 19, 1969 for coping with the impending Upper Mississippi River flood. Mr. Viktora attended this meeting as a representative of FWPCA.

3. Technical Services

L. Breimhurst met in River Falls, Wisconsin with Dr. Milan Wehking, Project Director for the River Falls Demonstration Project of the "Channel Aeration Process for Stabilization of Sewage Solids." The project will demonstrate the use of the channel aeration process in place of a standard anaerobic digester for stabilizing solids from the existing primary and secondary settling tanks at the city's trickling filter sewage treatment plant. Construction on the project is scheduled to start April 15 with the evaluation phase to start July 15.

Chemists from the Ontario Water Resources Commission and Michigan Water Resources Commission attended a two-day phenol workshop at the Lake Huron Basin Office laboratory. Samples from the Detroit

River were analyzed, with each agency using their own methods and equipment. Results were compared and differences discussed. Since the three agencies supply data for International Joint Commission reports, standardization of the methods is necessary for proper interpretation of data.

Waste oil has appeared in large quantities in several small streams in the southeast Michigan area. Apparently tank trucks hauling waste oil are releasing it along highways instead of at disposal facilities. FWPCA field crews inspected oil spills at Novi and Pontiac, which were being contained and removed by State and county agencies, and a large spill on the Clinton River at Mt. Clemens, which was still under observation. Oil was also observed on the Rouge River near the Oakwood pumping station.

4. Federal Activities

It was learned that Commonwealth Edison Company had agreed to conditions previously recommended to limit and control pollution from Zion, Illinois Nuclear Power plant. It was recommended to the Corps of Engineers that such conditions be incorporated in any permit issued to the company.

A request for permit by Esco Dredge and Fill Corporation to dredge at their docks in Erie Harbor, Pennsylvania and to deposit the dredged materials in Lake Erie was reviewed after receipt of analyses of bottom samples. We requested that the Corps of Engineers not issue a permit for the proposed dumping except for a small area under consideration which was found to be only moderately polluted. The majority of the area to be dredged was found to be highly polluted.

In response to a Headquarters request, a briefing document, concerning National Lead Company, St. Louis, Missouri, was prepared and transmitted. This document provided background information on National Lead's permit application, related correspondence, waste discharge characteristics, and on water pollution problems in the St. Louis area.

Word was received from the Iowa State Department of Health that an oil slick on the Mississippi River had been traced to Savanna Army Depot. A staff member was immediately sent to the Depot to investigate. It was learned that a considerable quantity (approximately 3,000 gallons) of fuel oil had reached a slough in the Mississippi River some three months ago, after a malfunction in the Depot's boiler plant fuel system. The oil was contained in the slough by constructing an earthen dike. The oil was subsequently burned off. The cause of the recent oil slick in the Mississippi River is not yet apparent; however, investigation is continuing.

A review was made of an application for permit by the City of Rochester, New York to install a steel sewer outfall pipeline

in Lake Ontario, extending about 9,600 feet into the Lake. Samples were collected and analyzed by the Lake Ontario Basin Office and the results indicated that the pollutional characteristics of the bottom materials are marginal. On the basis of this information, we expressed no objection to the granting of the permit to deposit the excess dredged materials on the established dumping grounds in Lake Ontario.

A review has been made of an application for permit by the International Salt Company to dredge approximately 3,000 cubic yards of material in its slip in the Old Cuyahoga River Channel, and to place the dredged materials on one of two authorized dumping grounds in Lake Erie. Samples were collected and analyzed by the Lake Erie Basin Office, and analysis revealed that the bottom materials are completely sterile of any aquatic life higher than bacteria, and chemical analysis showed pollutional constituents to be in such magnitude that the sediments are highly polluted. It was recommended that all dredged material be deposited in a suitable enclosed area on upland property or in a water area enclosed by relatively impermeable dikes rather than in the open waters of Lake Erie.

John Egan, president of Chicago's Metropolitan Sanitary District, set April 1 for a meeting of concerned city, state and federal agencies, including the FWPCA, to come up with a plan for dealing with oil spills in the Chicago area. The action followed an oil spill from Proctor and Gamble. About 5,000 gallons of soybean oil spilled into the Chicago River during the last week of March. Jim Pappas of the Great Lakes regional office was named as FWPCA representative to the meeting.

It was recently reported to this office that the Bureau of Public Roads interstate highway projects and HUD urban renewal projects are being constructed in the Toledo, Ohio area without following requirements of sewer separation or installation of separate sewers. The two agencies were requested to provide information regarding their present practices in this area since the Lake Erie Enforcement Conference recommendations are in effect in this area.

A review was made of a permit by the U. S. Steel Corporation to dredge 3,000 cubic yards of material at its dock in the Cuyahoga River, Cleveland, Ohio, and to dispose of the dredgings on the authorized dumping ground in the open waters of Lake Erie. Analysis of samples collected at this location indicated the bottom sediments are grossly polluted, and it was therefore recommended that the permit not be issued for the proposed project.

A review was made of an application for permit by the Associated Estates Corporation, Cleveland, Ohio, to place shale and rubble

fill in Lake Erie at Lakewood, Ohio. It was learned that the materials being dumped into the Lake are unwanted excavated materials from the construction site, and it was recommended to the Corps of Engineers that the request for permit be denied, and that the applicant be required to dispose of these excavated materials and those already dumped at this location on upland property.

5. Cooperative Programs

A meeting was held March 21, 1969 at the Morton Arboretum, for coordinating the efforts of several agencies involved in the water management and pollution control activities on the Illinois, Fox River and Chain 'O' Lakes. This meeting was sponsored by the Northern Illinois Water Resource and Conservation Commission and the Northeast Illinois Natural Resource Service Center. Representatives from the Federal government, States of Illinois and Wisconsin, and several county governments were present and participated in the program. C. Risley presented the FWPCA program as it affects the Fox River.

A meeting was held with New York State Department of Health officials in Albany to discuss implementation of recommendations in the joint FWPCA-NYSDH report on Lake Ontario. The Regional Director reiterated our position as to the purpose and application of the entire report as it relates to specific sections of the Federal Water Pollution Control Act and our overall program in the basin. Accompanying Mr. Poston were Messrs. Klashman, Sutton and Townsend. NYSDH has developed a phosphorus control policy, applicable to plants one MGD and larger, which requires treatment to effect discharge levels between 0.5 and 1.0 mg/l. Direct discharges to the Niagara River and Lake Ontario would be required to achieve the levels by December 1975; indirect discharges by December 1980. There appears to be no justifiable rationale for the later target for indirect discharges and our efforts will be directed towards meeting the proposed levels by 1975.

Dr. Edward Martin, Director, Clean Water Task Force, in his first public statement outlining Cleveland's plans to abate water pollution, proposed the creation of an authority for the metropolitan area in which Cleveland would finance, through revenue charges, construct and operate facilities to treat with advanced waste treatment all municipal and industrial wastes in the area at a cost of \$1.5 billion.

6. Enforcement

An affidavit describing the Lake Michigan Basin Office investigation of an oil spill incident in the Sanitary and Ship Canal last September was forwarded to the U. S. Coast Guard as requested for use in possible prosecution of the International Harvester Company by the U. S. Justice Department.

a grant check of \$37,000 was retrieved just in time by having the Lacon Postmaster return the check to us rather than deliver it to the Village of Lacon. Further payments will be withheld pending a complete review of the project.

The Regional FWPCA Manpower Development and Training Officer is exploring the possibility of entering into a contract for on-the-job training of sewage treatment plant operators in the Chicago area. If this materializes, the possibility of having one staff engineer from Construction Grants participate in the training will be considered.

Increasing talk about the possibility of a State sewage treatment grant matching program in Iowa has resulted in a statement of position by the Iowa Water Pollution Control Agency. At its last commission meeting, the State refused to either endorse or disapprove such a State program. Instead, the State announced its neutrality.

According to reports from the Michigan Water Pollution Control Agency, the Michigan Senate is considering a precedent-shattering amendment to legislation that it is considering for implementing the State's \$285 million sewage treatment works bond issue. If the amendment is successful, it would require the State legislature to review and approve all sewage treatment works construction grant projects before such projects are certified by the State agency. The final outcome on this matter is expected within the relatively near future.

For the first time in a number of months, a recommendation has been sent to headquarters asking for concurrence in the outright disapproval of a construction grant project. The project in question is located in Red Wing, Minnesota. The disapproval recommendation is based upon the fact that the identical project has received an R&D grant and, therefore, it is not eligible for a construction grant.

8. Pollution Surveillance

C. Oster and a representative of the Minnesota Pollution Control Agency conducted final flood damage inspection surveys on the sewerage systems of the cities of Mankato, Wells and North Mankato. These inspections were conducted to ascertain whether the flood connected damages of the August 7, 1968 rains had been corrected. The inspections were necessary to enable the Office of Emergency Preparedness to make payments to the cities. The repairs and cleaning were completed and the projects were approved for payment.

Mr. Oster attended a meeting in Madison, Wisconsin conducted by the Wisconsin Department of Local Affairs and Development to discuss the impending river floods. All of Wisconsin's efforts

to date have been of a coordination and advisory nature to the communities. With this type of preliminary work the involvement of FWPCA in flood damage assessment should be easier as lines of communication are being established now.

The water quality monitor on the Minnesota River has been disconnected and moved to high ground in anticipation of near record flooding. The monitors on the Mississippi River are not in danger and will continue to operate and transmit data during the duration of the expected floods. It is anticipated that the Minnesota River monitor will be out of service for approximately one month.

A spill of spent pickle liquor was reported in the Frank and Poet drain, by a citizen in Gibraltar, Michigan, it came from the McLouth Steel Corporation. Spills have been reported from McLouth Steel at this location in the past but this is the first report in the last two years. The Michigan Water Resources Commission is investigating.

A detergent spill from an unknown industrial source near or in Brockport on the Barge Canal caused a billow of foam close to "100" feet high. County and State officials suspect several sources and are investigating. The foam was noted at a 30 foot waterfall west of Brockport just downstream of a discharge from the partially filled Barge Canal to Sandy Creek.

Messrs. Libby, Fisher, and Kahn made an aerial reconnaissance of the Fox River (Illinois) from a point below Yorkville, Illinois to a point near Burlington, Wisconsin on March 18, 1969. Photographs were taken. No unusual conditions were noted except that siltation and sludge beds were evident below the larger cities; and the whole basin is becoming more populous than it was only a few years ago.

An 8,000 gallon asphalt oil spill reported was contained and removed from the Mississippi River by the GAF Corporation to the satisfaction of the FWPCA and the Minnesota Pollution Control Agency. The State agency will be pursuing with the company safeguards to install to prevent a future occurrence.

9. National Water Quality Laboratory - Duluth

Preparation of technical summary sheets for the Lake Superior Enforcement Conference was begun. These are to be used as a basis for standards on Lake Superior.

Approximately ten research grant proposals were received for technical review by staff members.

B. R. Jones met with Bureau of Commercial Fisheries workers at Ann Arbor, Michigan to delineate areas of responsibility on temperature research and avoid duplication of effort.

On March 26 Dr. Mount met with staff members of the Under Secretary Train, Commissioner Dominick, and Assistant Commissioner for Research and Development to discuss the pesticide problem in Lake Michigan coho salmon and develop an action program for FWPCA.

10. International Program

A report from Canadian conservationists that several thousand Greater Scaup ducks in the Lower Niagara River were observed to be coated with oil on Wednesday, February 26 was investigated. The investigation revealed that the Niagara River has recently been relatively free of oil. The ducks had left the river by the following day and apparently were a transient flock that had picked up the coating or discoloration at some other location. No ducks killed due to an oil coating were found.

The Michigan Water Resources Commission helicopter crew sighted a white substance coming from the Canadian side of the Detroit River, just above the Rouge River Channel and extending downstream in streaks as far as Wyandotte, Michigan. Canadian authorities informed us that it was coming from a dump belonging to the City of Windsor and located adjacent to the Canadian steamship slip. High water caused by easterly winds on Lake Erie floated much of the material out into the Detroit River. Windsor and Ontario Water Resources Commission officials are investigating the problem.

An FWPCA field crew observed oil on the Rouge River coming from the Oakwood pumping station and other oil of an unknown origin. The Michigan Water Resources Commission was notified.

11. Public Information

A letter was received from a private citizen, Mr. Rick Riley of Keokuk, Iowa, complaining about pollution of the Mississippi River and Sandusky Creek, resulting from depositing trees and garbage on the ice and waters of the streams. In reply, Mr. Riley was informed of the responsibility of the FWPCA under the Water Pollution Control Act, the Clean Water Restoration Act, and the water quality standards applicable to interstate waters. He was further informed of the scheduled Standards Setting Conference in Iowa, and extended an invitation to attend. A copy of our letter was forwarded to the Iowa Department of Health for their information.

The Lake Michigan Basin Office staff designed, equipped and staffed an exhibit at the Chicago Boat, Travel and Outdoors Show the week of March 21-30 at the International Amphitheatre. It was an educational exhibit which include a continuous color slide show, literature, and personal contacts to answer questions about water pollution control activities.

Frank Corrado, formerly with CBS News, Chicago, joined the Great Lakes Region as Public Information Director.

III. Administrative Services

William Abbott, Acting Chief, Program Development Branch, Lake Michigan Basin Office, announced his resignation from government service effective March 29. Mr. Abbott has accepted a position with S. C. Johnson and Son (Johnson Wax) in Racine, Wisconsin.

<u>Personnel Staffing</u>	<u>January 31, 1969</u>	<u>February 28, 1969</u>	<u>March 31, 1969</u>
A. Total Positions	224	223	221
B. Total Personnel on Board	218	220	221
C. Total Personnel Gains	2	3	2
1. New Hires	1	2	2
2. Transfers	1	1	0
D. Total Personnel Losses	0	1	1
1. Resignations	0	1	1
2. Transfers	0	0	0

#

Period Covered: February 1969

- - -

Submitted: March 17, 1969

REGIONAL DIRECTOR: H. W. Poston



I. Regional Activities

1. Upper Mississippi River Basin Study

The Corps of Engineers, North Central Division, reported in St. Paul, Minnesota that the Upper Mississippi River Basin Comprehensive Study will be completed on schedule during 1969. The complete phase - one report will be reviewed during early summer by the governors of the seven states involved in the study. Evidence presented by federal and state governments will lead to smaller regional studies to solve problems such as pollution or inadequate recreational facilities.

2. Oil Pollution - Lake Oil Drilling

Several states are manifesting increased concern with the matter of offshore drilling for gas or oil in lake beds. According to a survey conducted by a local newspaper only Michigan of the four Lake Michigan states would reject requests to drill for gas or oil in the bed of the Lake. The other states indicate that there is no rule on the subject because they have never had such a request. Drilling takes place in Canadian waters of Lake Erie and Pennsylvania waters have been leased for drilling. It was reported that Ohio now has no plans to lease Ohio waters for drilling.

3. Metropolitan and Regional Planning

State and local agencies are showing greater recognition of the advantages in avoiding piecemeal pollution-control projects. Considerable attention has been given to this subject by the Southeastern Michigan Council of Governments and in Lake County, Illinois' master plan for public works.

II. Industrial Program Comments

1. Water Quality Standards

A meeting of Water Quality Standards Coordinators was held in Chicago. A program for the inclusion of water quality standards compliance in the STORET inventories was presented. The printouts for Fiscal Year 1970 will include municipal listings, and similar industrial printouts are planned for Fiscal Year 1971. States are expected to cooperate in this program through the

mechanism of the State Program Grant Application. The format for the preparation of summaries of the Water Quality Standards of all the States was presented, and the development of those summaries will begin in the near future.

Drafting of the Iowa standards conference report was completed. The report was given regional and headquarters review.

A compilation of water quality criteria for the Lake Superior states was completed. The report compares Michigan's, Minnesota's and Wisconsin's respective criteria for the various water uses assigned to Lake Superior.

2. Comprehensive Planning

Comments on the proposed Lake Huron Basin Report were received by the Lake Huron Basin Office from the Michigan Water Resources Commission and are being reviewed for incorporation into the report. Some of the maps and tables are being revised for further discussion with the Michigan Water Resources Commission.

3. Technical Services

Two congressional inquiries concerning the Donald C. Cook nuclear power plant near Bridgman, Michigan were answered by the Lake Michigan Basin Office. The inquiries were concerned about the effects of the waste heat generated by the plant and its compliance with water temperature standards.

Representatives of the Lake Ontario Basin Office attended a meeting of the Finger Lake Association sponsored by the Rochester Committee for Scientific Information. Professor David Comey of Cornell University, Executive Director of the Citizens Committee to Save Cayuga Lake, discussed the thermal pollution problem which may develop with the construction of nuclear power plants on the Finger Lakes.

The Director of the Lake Erie Basin Office met with representatives of the Ohio Department of Natural Resources concerning the subject of oil and gas well drilling in Lake Erie.

The Director of Lake Erie Basin Office met with a representative of the Soil Conservation Service to discuss various programs pertaining to water pollution control including some of the pollution problems related to land runoff in the Lake Erie Basin.

Microbiology personnel of the Lake Michigan Basin Office completed a special report on the Salmonella Survey conducted by the Lake Ontario Basin Office on the Rochester Sewage Treatment Plant, Genesee River and selected beaches in the vicinity of Rochester. Overall, 87 Salmonella strains were isolated representing 21 serotypes.

4. Control of Pollution from Federal Activities

The report of an investigation of waste discharges from the Jordan River National Fish Hatchery, Elmira, Michigan was forwarded to the Bureau of Sport Fisheries and Wildlife. A study was conducted at this installation by the Lake Michigan Basin Office following a complaint against the facility. The conclusion of the report was that the Hatchery is presently in violation of the Michigan Intrastate Water Quality Standards and the intent of the Executive Order. Information was subsequently received from the BSF&W that a project has been requested to provide a settling basin to remove solids producing nutrients.

A preliminary Engineering Report was reviewed pertaining to remodification of wastewater treatment facilities at the Michigan Army Missile Plant, Sterling Heights, Michigan. Two alternatives were proposed but it appears that discharge to the Detroit system is the preferable solution to the problem.

A review was made of Federal installations in and adjacent to the area to be considered at the Iowa Water Quality Standards Setting Conference. A mailing list of concerned Federal agencies and installations was prepared at the request of our Office of Enforcement and Cooperative Programs. Arrangements have been made for a staff member to visit all significant Federal waste discharge locations in the conference area prior to the April 8 session.

A review has been made of an application for permit by the City of Chicago, to install storm sewer outfalls in a cooling system intake and outfall through a sheet steel bulkhead at the site of the new McCormick Place. The Metropolitan Fair and Exposition Authority passed a resolution that no pollution would occur to Lake Michigan as a result of the completed construction. This will be accomplished by the installation of grease and oil traps and collecting basins and pumps to discharge the runoff into the sanitary sewer system during off-peak hours and thus prevent any polluted materials from discharging to Lake Michigan. On the basis of the above information, no objection was made to the granting of the permit.

5. Cooperative Programs

The Training Officer participated in an orientation meeting in Washington on the national contract to FWPCA for operator training. Meetings or contacts were made on this subject with the Metropolitan Sanitary District of Greater Chicago, the State of Iowa, the State of Wisconsin and the Milwaukee Sewerage Commission. The City of Des Moines, through the State of Iowa, has asked that funds be reserved for training 40 waste treatment operators through the national contract.

A visit was made by the Training Officer to the University of Toledo with an inspection team from Washington to survey the efficacy of the grant to this institution for graduate training in biological engineering. Assistance was given to the Southeast Campus of Chicago City College and to Southern Illinois University in preparing curricula for technician training.

Illinois, Iowa, Michigan, Minnesota and Wisconsin have submitted reports on their water pollution control program expenditures. Except for the Illinois program these reports indicate appropriate progress in implementing the State's water pollution control programs. Illinois is presently under budgetary restrictions which will limit the full implementation of the State's water pollution control program. However, these restrictions may be lifted before the end of Fiscal Year 1969. Estimates of the Federal Program Grant allotments for Fiscal Year 1970 were provided to the States.

6. Enforcement

Illinois, Indiana, Michigan, Wisconsin and the FWPCA submitted reports listing all wastewater discharges to the Lake Michigan Basin at the February 25, 1969 Reconvened Lake Michigan Enforcement Conference. These reports also contained schedules for construction of required treatment facilities for all polluters believed to be adversely affecting the water quality of Lake Michigan. The conferees reported on progress they had accomplished to abate pollution and to carry out the recommendations of the first conference. The conferees restated 1972 as the outside date for completion of all treatment facilities. Each conferee will prepare a detailed list of municipalities and industries which are required to provide phosphorus removal and the quantity they are to remove to provide a net reduction of 80 percent with the state. They established a two year water quality monitoring program for the lake and major tributaries, and directed the Pesticide Committee to establish a program for monitoring and tracing pesticides. The Nuclear and Thermal Pollution Committee was requested to prepare specific recommendations for discharge limits and methods for controlling potential thermal and nuclear pollution.

7. Construction Grants

The Minnesota and Iowa Leagues of Municipalities are drafting bills for their State legislatures aimed at enacting State matching grant programs. The enactment of such matching programs would be designed to qualify these States for the higher Federal grant percentages. The action by Iowa is particularly significant because heretofore that State had demonstrated no action on behalf of a State matching program.

Last year, the City of Des Moines sewage treatment plant bypassed its entire load of raw sewage into the Des Moines River for a period of six weeks. This was done during the construction work on project WPC-Iowa-217. In addition to our objections at the time, the Iowa State Conservation Department has now assessed some \$31,000 in damages against the City of Des Moines for fish kill damages caused by the bypass.

The City of Detroit, Michigan will soon be advertising on the first leg of its \$98 million sewage treatment and interceptor improvement project. About \$20 million in initial construction will be advertised for bids within the next six weeks. Detroit is anxious to keep the project in conformity with Federal requirements for possible Federal grant reimbursement later. Accordingly we are servicing the project.

The City Council of Warren, Michigan, has authorized its City Attorney to file a suit to contest the Michigan Water Resources Commission's recent ruling refusing to certify Warren's pending construction grant application. The Commission refused to certify the application to the Federal government because the proposed Warren project was not compatible with the regional plan for the Detroit area. As of this writing, suit has not actually been filed. One result of such a suit could be to tie up the entire \$335 million Michigan bond issue.

As a follow-up to the meeting last month in Lake Forest with Congressman McClory to discuss any possible Federal aid to the North Shore Sanitary District, Illinois project, WPC-Ill.-754, the Congressman filed a bill asking for \$25 million in direct Federal grant aid for the North Shore area. This bill would bypass the Federal Water Pollution Control Act grant formula by providing direct relief to the project because all of Illinois' funds are committed for the foreseeable future. A hearing was held on the bill on March 4.

8. Pollution Surveillance

The Technical Committee established to assess results of the pollution control program recommended by the Calumet Area Conference is reviewing water quality data collected by FWPCA, Illinois, Indiana and the Chicago Metropolitan Sanitary District. At a meeting held at the Regional Office with MSD personnel and a representative from headquarters concerning the exchange of data the MSD indicated that it would probably enter existing and future data into the STORET system.

In response to requests from the States of Minnesota and Iowa for STORET coding and river mileage information, 3 prints each of 122 maps were furnished to the Minnesota Pollution Control Agency and 2 prints of each of 112 maps were furnished to the Iowa Department of Health.

A report draft of the Federal-State water quality monitoring network for the State of Illinois was prepared by the Lake Michigan Basin Office and submitted to the Regional Office for review.

The Surveillance Branch compiled an inventory of known pollution spills which occurred during 1968. A total of 74 spills had been reported to the Great Lakes Regional Office.

A representative of the Pollution Surveillance Branch met with Ninth District Coast Guard Officials in Cleveland to discuss coordination of oil contingency planning in the Great Lakes Region. The plan was also discussed with a Lake Erie Basin Office staff member.

9. Research and Development

The handbook on the mechanics of Research and Development grant and contracts monitoring for Project Officers within the Great Lakes Region was prepared and distributed to the Basin Offices. Requests for copies of the handbook have also been received from R&D representatives of other Regional Offices.

Six new requests have been received from Washington for Project Officer assignments to recent R&D grant awards within the region. Inasmuch as the Region now has 13 of its professional staff already involved in monitoring 34 projects, this entire program of Project Officer designation will have to be re-evaluated.

A total of 14 formal applications for R&D grants were received for either technical or policy review by the Regional staff. An analysis of the existing Regional R&D program together with projections of work loads and recommendations was prepared for consideration by Headquarters.

10. National Water Quality Laboratory-Duluth

Several experiments are under way to establish safe levels of copper in Lake Superior water for various types of desirable aquatic life in order to provide information needed for establishing more realistic standards for water quality on Lake Superior. At present, standards applicable to other waters are also suggested for Lake Superior, but because of the very soft water and unique fauna, more stringent requirements are needed.

A meeting was held with Reserve Mining Company, Minnesota Pollution Control Agency, and the Upper Mississippi River-Lake Superior Basin Office at the Laboratory on February 14 to discuss technical aspects of the Taconite Report and to reach agreement where possible on methods.

Dr. Donald I. Mount traveled to Cincinnati to visit the Fish Toxicology Laboratory at Newton to review the Newton operation with Mr. Cawley and Dr. Stephan, and to Washington, D. C. on February 4 to confer with Dr. Stephan, Dr. Hirsch and Mr. Grant regarding plans and budget for proposed temperature studies at Monticello, Minnesota. A complete package of plans, objectives, and costs has been prepared for this project.

Mr. Teasley attended an Oil Pollution Meeting on February 28 called by the Seaway Port Authority (Mr. Oberlin and Mr. Sauter, Duluth and Superior Port Directors), and chaired by Mr. Len Theobald. The meeting was held at the Port Terminal in Duluth.

Approximately twenty-five statements of research need were received from headquarters through the regional office and approximately seventy-five more were initiated at the laboratory. Work plans for each need were developed and submitted.

The laboratory research program suffered a serious catastrophe during the month when a valve cross-connecting the tap water system with the lake water system in the building was partially opened by a contractor, and chlorinated tap water entered the lake water system. Over one-quarter of the building received chlorinated tap water, and almost all of the invertebrate experiments were lost as a result of the chlorine.

11. International Program

The Regional Director, the Director of Technical Programs and representatives of the Lake Huron, Lake Erie and Lake Ontario Basin Offices attended the International Joint Commission Advisory Board meeting at Detroit. The main purpose of the meeting was to review the second draft of the IJC report on Water Quality of the Lake Erie and the Lake Ontario-St. Lawrence River Basins. A report on water quality was submitted to the Board for approval.

12. Public Information

The Director of the Lake Ontario Basin Office has been requested to review and discuss the Lake Ontario Report at separate meetings of the Water Resource Planning and Development Boards which have ongoing studies in the Oswego River Basin. The requests have been accepted and a schedule has been arranged for presentations.

A meeting was held at the United Auto Workers Solidarity House to discuss regional planning for water pollution control. The Director of the Lake Huron Basin Office and representatives of the Michigan Water Resources Commission and the Detroit Metropolitan Water Services participated in the discussion.

The Chief, Federal Activities Coordination Branch appeared on the program of the Kenosha, Wisconsin Chapter of the League of Women Voters and gave a talk regarding FWPCA activities and pollution problems in the Great Lakes Region.

The Regional Construction Grants Program Director was one of the principal speakers at a meeting in Detroit of over 150 Michigan State legislators, representatives of the Michigan Governor's Office and consulting engineers. The purpose of the meeting was to discuss ways of implementing the recently passed \$335 million Michigan water pollution control bond issue. Concern was expressed at the meeting about the lack of full Federal construction grant funding.

During 1968 the Office of Public Information received approximately 1,100 requests by letter and telephone for publications. From 200 to 500 additional requests were handled by other programs.

III. Administrative Services

<u>Personnel Staffing</u>	<u>December 31, 1968</u>	<u>January 31, 1969</u>	<u>February 28, 1969</u>
A. Total Positions	223	224	223
B. Total Personnel on Board	216	218	220
C. Total Personnel Gains	4	2	3
1. New Hires	1	1	2
2. Transfers	3	1	1
D. Total Personnel Losses	5	0	1
1. Resignations	4	0	1
2. Transfers	1	0	0

#



13



1

11



Period Covered: January 1969

- - -

Submitted: February 18, 1969

REGIONAL DIRECTOR: H. W. Poston

H. W. PostonI. Regional Activities1. Dredging

A Buffalo District Corps of Engineers 12 volume report, "Dredging and Water Quality Problems in the Great Lakes" was distributed to its own headquarters and to FWPCA for review. The report will probably be released in March. A press release reported significant progress by the Corps of Engineers and FWPCA on joint efforts to reduce or eliminate pollution of the waters of the Great Lakes incidental to the maintenance of essential depths in harbors and channels by government and private interests. Both agencies are working on a cooperative pilot study of dredge spoil disposal methods and agreement has been reached on an interim program pending long-range solutions. FWPCA Great Lakes Region Basin Offices have participated in this joint undertaking.

2. Pesticides

Concern with the possible dangers from the use of pesticides continues to be manifested by government and private groups. Additional testimony was presented at hearings started in December by the Wisconsin Department of Natural Resources. (Representatives of several states are introducing in State and Federal legislatures bills designed to control pollution from these substances.)

3. Regional Work Plans

The Regional Work Plans for Fiscal Year 1970 were completed and forwarded to the Commissioner for review. Projected budget needs for Fiscal Years 1971-1975 were included with the Work Plans.

II. Individual Program Comments1. Water Quality Standards

Iowa's water quality standards were approved by the Secretary of the Interior, but important features were excepted from that approval. Pursuant to those exceptions, the Secretary called a conference to be held in two sessions on April 8 and 15 in Davenport and Council Bluffs to consider the establishment of standards in the Mississippi and Missouri River Basins. The exceptions include treatment and disinfection requirements, temperature criteria and the plan of implementation. A report

outline was prepared, schedules set and arrangements made for the Mississippi River Basin session. Mr. Dumelle of the Office of Enforcement and Cooperative Programs has been assigned responsibility for the coordination of efforts preparatory to the conference.

2. Comprehensive Planning

The Regional Director visited the Lake Huron Basin Office and discussed the Lake Huron Report, emphasizing the importance of comprehensive plans as a key method for achieving a clean water program.

The evaluation study of the alternatives for development of the Oakley Reservoir Site, Sangamon River, Illinois, has been forwarded for Washington and interagency review. The quality control aspects of this project and the other Departmental interests are now being summarized in the Departmental report.

The Water Pollution Control Program report on the Black-St. Lawrence Rivers portion of Lake Ontario Basin was submitted to Washington for clearance.

3. Technical Services

A "Special Report on Water Quality of Lake Superior in the Vicinity of Silver Bay, Minnesota" was completed. This report represented the FWPCA contribution to the USDI Study Group which furnished information to the Regional Coordinator for his use in commenting on the matter of re-validation of the Corps of Engineers permit to the Reserve Mining Company for discharging taconite wastes to Lake Superior. Staff of the Lake Michigan Basin Office and the National Water Quality Laboratory at Duluth contributed to the preparation of the report.

Messrs. R. Schneider, M. Stein, D. Mount, and D. Bryson, FWPCA, met with representatives from the Minnesota Pollution Control Agency and Reserve Mining Company to discuss some items relating to the company's waste discharge.

Technical Programs and Lake Michigan Basin Office staff members participated in inspections of industries in the Calumet Enforcement Conference Area to assess progress of construction of waste treatment facilities. The inspection team included representatives of the four conferees -- Metropolitan Sanitary District, Illinois, Indiana, and the FWPCA. Reports of factual data obtained on the inspections were prepared by Technical Programs staff. Summaries of the inspection data were presented at the conference on January 30, 1969.

The Director of the Lake Erie Basin Office met with the staff of the Fisheries Research Board of Canada at Winnipeg, Manitoba to discuss the practical aspects of pollution abatement with special emphasis on controlling eutrophication in Lake Erie. The Canadians are conducting research into eutrophication, and means of control and they were particularly interested in knowing how this was being handled in Lake Erie.

The Director of the Lake Michigan Basin Office presented an official FWPCA position statement concerning the control of pesticides to the Illinois Water Pollution and Water Resources Commission.

A 22-inch force main of the Buckeye Pipeline Company broke in Lima, Ohio on January 13, 1969 releasing approximately 100,000 gallons of volatile crude oil. An estimated 6,000 persons were evacuated from the break area as volatile crude oil covered streets and flowed into the city sewer system. Oil reaching the city sewage treatment plant ignited and exploded causing a temporary shutdown of the plant. Lake Erie Basin personnel notified the Ohio State Pollution authorities of the incident and offered technical assistance to Lima and Ohio officials. Massive cleanup operations were undertaken to rid the streets, ground, sewers, and Ottawa River of oil.

4. Control of Pollution from Federal Activities

Among the activities were the following:

- a. The Federal Activities Coordinator attended a meeting called by the Corps of Engineers to discuss the National Lead Company application for a permit to construct a single outfall into the Mississippi River to dispose of all industrial wastes. Persons in attendance at this meeting included the Regional Director, Chief of Facilities Programs, Corps of Engineers personnel, representatives of the National Lead Company, the Missouri Water Pollution Control Board, the Illinois Sanitary Water Board, and representatives of the Metropolitan Sanitary District. Three alternatives to the solution of the case were presented. A team of FWPCA industrial waste specialists visited the applicant for the purpose of determining, if possible, waste treatment methods. A report is being made on the investigation. Resolution will be attempted at another meeting 60 days after receipt of the FWPCA report.
- b. A report was forwarded to NASA, Lewis Research Center, Plum Brook Station, and included recommendations made by Mr. George Harlow, Director, Lake Erie Basin Office,

following his visit to the installation. The principal recommendations involve plant tests for phosphate reduction, preparatory to placing the facilities in full operation by next summer in order to comply with the Lake Erie Enforcement Conference recommendations.

- c. A contract for \$233,000 has been let by K. I. Sawyer Air Force Base to rehabilitate existing secondary treatment facilities and to provide laboratory space. A project for advanced waste treatment facilities (phosphate removal and further BOD and suspended solids reduction) is being programmed to comply with Michigan intrastate water quality standards. Estimated cost of these facilities is \$800,000.

5. Cooperative Programs

- a. The Fiscal Year 1969 program grant reallocation process was begun. The States of Iowa, Michigan, Minnesota and Wisconsin will request all funds currently available and plan to utilize any reallocated funds which may become available. Illinois plans to utilize only funds currently available and does not expect to request any reallocation. All five states will be eligible for the original FY '69 allocation and any normal reallocation.
- b. The Regional Training Officer visited Springfield, Illinois to confer with State training officials on sewage treatment plant operator training. Conferences were held with the staffs of the Lake Michigan and Lake Erie Basin Offices to determine in-service training desires.
- c. A \$1,000,000 on-the-job training allocation to FWPCA from the Labor and HEW Departments has been finalized. Negotiations are under way with the City of Cleveland, City of Detroit, City of Des Moines and the Metropolitan Sanitary District of Greater Chicago to make FWPCA grants for operator training purposes within the next six months.

6. Enforcement

- a. The second session of the Lake Michigan-Calumet Area Enforcement Conference was continued on January 29, 1969. The findings of the inspection team, which visited ten industries to determine the status and extent of their pollution control efforts, were presented to the conferees. Extensions to the December 31, 1968 deadline for facility construction were recommended by the conferees for several industries. Extension of the deadline was not recommended for Republic Steel and U. S. Steel South Works, and those

cases were referred to the Secretary of the Interior. The committee established in December 1968 to review present water quality and waste sources in the conference area to establish any need for additional requirements, also reported to the conferees. That committee presented its proposed approach and activities for the conferees' consideration. The committee was instructed to meet and prepare for the conferees any pertinent budget and personnel considerations and delineate areas of responsibility.

- b. A report outline was prepared, schedules set and arrangements made for the Lake Superior Enforcement Conference called by the Secretary of the Interior this month. The conference to be held on May 13 in Duluth will include the entire Lake Superior Basin, and Michigan, Minnesota and Wisconsin will be parties to the conference. Mr. Bryson, Director of the Upper Mississippi River-Lake Superior Basin Office, will be responsible for the preparation of the conference report.

7. Construction Grants

- a. The Minnesota Pollution Control Agency now has a new procedure before approving project plans and specifications. The procedure calls for issuing public notices to all parties that might be affected by a proposed project. The notices must be distributed 30 days prior to any approval of project plans and specifications in order to allow additions or modifications to such plans and specifications based on any filed objections. This procedure will result in somewhat longer periods for placing projects under construction although it should result in projects that have been more fully aired before approval.
- b. Michigan has completed a draft copy of a State law to implement its recently passed \$335 million State grant bond issue. The draft calls for pre-financing a segment of the Federal share so that each grant applicant will receive at least a 55 percent combined Federal-State share in the outset of a project. The draft copy of the bill appears to be acceptable from FWPCA's standpoint.
- c. The long-lingering controversy regarding whether the State of Michigan would certify the City of Warren construction grant application has come to a conclusion. This is the project that wants to go it alone rather than join with the adjacent Detroit treatment system as recommended in

our Lake Erie comprehensive report. In a ruling late last week, the Michigan Water Resources Commission disapproved the Warren application by refusing to certify it for consideration for either Federal or State funds.

- d. Congressman Robert McClory has requested a meeting to discuss the pending possible reimbursement application filed by the North Shore Sanitary District, Illinois, WPC-Ill-754. The overall project will amount to \$35 million and the Congressman is seeking ways to insure that the project will be funded to the maximum from a Federal standpoint. The meeting called by him will be held at the Lake Forest City Council Chambers in early February. In addition to representatives from the Regional Construction Grants Program, the Illinois Sanitary Water Board and others will also be present.

8. Pollution Surveillance

- a. The report of the Monitoring Committee for the Conference in the Matter of Pollution of Lake Michigan and Tributary Basins was submitted to the Conferees.
- b. The long-term water quality surveillance plan was completed by the Lake Ontario Basin Office and forwarded to the Regional Office. Copies were furnished to NYSDH and USGS for review and discussion at a meeting planned in Albany.
- c. The Chief of Technical Activities, Lake Erie Basin Office, accompanied by a Basin engineer met with Ohio Department of Health personnel to discuss the coordinated Federal-State monitoring plans.
- d. Staff of the Lake Michigan Basin Office met with Iowa State officials January 10 in regard to their programs for water quality monitoring network, sample analysis procedures, laboratory facilities, staffing, and reporting.
- e. The report on the State-Federal surveillance program for Michigan was completed and copies forwarded to Michigan Water Resources Commission, Great Lakes Regional Office, Lake Erie Basin Office, Lake Michigan Basin Office, Lake Superior Basin Office for review. Arrangements are being made to incorporate the Federal portion of the surveillance program into Lake Huron Basin Office's 1969 field operations program.
- f. Staff of the Lake Michigan and of the Upper Mississippi River-Lake Superior Basin Offices met with representatives of the Wisconsin Division of Natural Resources in Madison to discuss Federal-State Coordinated Monitoring.

9. Research and Development

- a. The latest inventory of active projects of the Research, Development and Demonstration Program in the Great Lakes Region has been assembled. Active projects are those which have received funds in either FY 1968 or FY 1969. The inventory contains 118 entries for which approximately \$23 million have been obligated in Federal funds. A total of 35 other projects funded prior to FY 1968 were still in progress in FY 1968 but not considered to be active.

10. National Water Quality Laboratory - Duluth

Completion of the temperature, egg incubation studies of brook trout have been completed, and the results show that 53°F. is the maximum temperature in which the eggs can incubate normally. The newly hatched fry were slightly more tolerant to higher temperatures than were the embryos.

The experiments involving the exposure of brook trout to copper are now nearly complete and the results show that there is over 80 percent mortality of eggs and fry at .03 milligrams per liter of copper, and that at .015 m/l the mortality is less than 20 percent. This information, plus other information gathered in previous tests, suggests that the safe concentration of copper in Lake Superior is approximately .01 m/l.

Work is continuing to evaluate the effect of the undissolved copper contained in taconite tailings on aquatic life in the lake. The principal question of concern is whether or not these very small submicron particles of natural copper salts will dissolve in the lake during a long period of time.

The contract for construction of the log barriers on the experimental stream at Shayler Run has been awarded and construction should be completed by mid-March. All construction should be completed this spring, and the testing can be started.

11. International Program

The Regional Director participated in public meetings held by the International Joint Commission at Sault Ste. Marie, Michigan and Windsor, Ontario, Canada, for the purpose of reviewing water pollution problems of the St. Marys River, St. Clair River and Detroit River. Problem areas were identified, pollution control programs were presented and IJC took a firm position in calling for accelerated cleanup of the connecting channels.

III. Administrative Services

<u>Personnel Staffing</u>	<u>November 30, 1968</u>	<u>December 31, 1968</u>	<u>January 31, 1969</u>
A. Total Positions	222	223	224
B. Total Personnel on Board	217	216	218
C. Total Personnel Gains	1	4	2
1. New Hires	1	1	1
2. Transfers	0	3	1
D. Total Personnel Losses	0	5	0
1. Resignations	0	4	0
2. Transfers	0	1	0

MONTHLY REGIONAL DIRECTOR'S REPORT ... GREAT LAKES REGION

Period Covered: December 1968

Submitted: January 17, 1969

REGIONAL DIRECT: H. W. Poston

H. W. Poston

I. Regional Activities

Continued Emphasis on Pesticide Pollution

Both private and public organizations continued to press for greater research and controls on the use of DDT and other harmful pesticides. States relying heavily on the fisheries and supporting industries are especially concerned. Extensive hearings were held in the State of Wisconsin. In that state a petition was filed by the Citizens National Resources Association and the Izaak Walton League asking for an order prohibiting the use of DDT throughout the state. Hearings started in December by the Department of Natural Resources are to be continued in January. The Minnesota Environmental Defense Counsel is also asking for a ban on the use of DDT, and possibly other pesticides.

II. Individual Program Comments

I. Water Quality Standards

The Minnesota Pollution Control Agency at its November and December 1968 meetings considered the matter of Interstate Water Quality Standards. The Agency adopted changes, revisions and adjustments in the standards which were proposed subsequent to Secretary Udall's partial approval on June 18, 1968. These changes are now being considered by FWPCA.

2. Comprehensive Planning

In November, Secretary of the Interior Udall issued Order Number 2913 on the subject of increased Interior support for the Water Resources Council and River Basin Planning. Charles H. Stoddard, Regional Coordinator, Upper Mississippi-Western Great Lakes Area, USDI, took two significant actions involved in implementation of Order Number 2913. First he appointed the FWPCA Regional Director as his alternate member on the Great Lakes Basin Commission. Concurrently, he notified all Interior agencies involved in planning in the Great Lakes Basin of the formation of an ad hoc Great Lakes Basin Coordinating and Planning Committee, and asked each agency to name a member for that committee. C. R. Ownbey, Chief of the Planning Branch, Great Lakes Region, FWPCA, was designated Chairman of this committee.

Mr. Stoddard also appointed Mr. Ownbey as his representative on the Plan and Program Formulation Committee for the Great Lakes Basin Framework Study. That committee met and began the preparation of guidelines and criteria for plan formulation.

3. Technical Services

The Director of the Lake Erie Basin Office met with the Corps of Engineers to discuss with local government officials, industry and property owners the alternative disposal methods of Cuyahoga River dredgings.

Several staff members of the Lake Huron Basin Office attended a public demonstration of the dredging operations at Monroe Harbor, Michigan. The Corps of Engineers explained the dredging and disposal procedures.

Oil spills were reported in the Lake Huron and Lake Erie Basins. The Coast Guard is conducting investigations and reporting on the incidents. FWPCA personnel participated in this activity.

Staff members of the Lake Michigan Basin Office are making a study of Lake Michigan water temperatures. This information will be useful in the evaluation of planned nuclear power plant operations and their effects on water quality; staff members of the Lake Ontario Basin Office are cooperating with other governmental agencies in determining measures to avoid possible damage to Cayuga Lake from a proposed nuclear power station.

4. Control of Pollution from Federal Activities

Among the activities were the following:

- a) A draft was prepared of suggested criteria for determination of frequency of on-site visits to review waste disposal practices at Federal installations. This draft was prepared at the request of Mr. Ralph Holtje, Federal Activities Coordination, Washington.
- b) Comments were prepared relative to Corps of Engineers Design Memorandum No. 1, Ames Reservoir, Skunk River, Iowa. Recommendations were made pertaining to the Story City sewage treatment plant which will require protective works and possibly chlorination and/or phosphate removal if effluent is to continue to be discharged into the reservoir. Other recommendations were made.

- c) Comments were forwarded to the Buffalo District, Corps of Engineers, concerning the Niagara Frontier State Park Commission's request for a permit for an existing cofferdam at Beaver Island State Park in the Niagara River. Studies conducted by the Boston Office of the Bureau of Sport Fisheries and Wildlife indicated significant silt loadings of concern to fish and wildlife interests, were being discharged to the Niagara River by unauthorized construction activities. It was recommended that the permit not be issued and that the applicant be required to remove the cofferdam as soon as possible, and that any further silt loadings to the river be minimized by methods satisfactory to the District Engineer.

5. Cooperative Programs

The revised Wisconsin State Program Plan was approved by the Commissioner December 27. Iowa resubmitted its plan, which was forwarded to headquarters for approval. First Quarter payments have been made to Illinois, Michigan and Minnesota.

Mr. Jacob D. Dumelle has been appointed Manpower Development and Training Officer and is devoting full time to implementing plans for a well-rounded Regional manpower and development training effort.

6. Enforcement

The Calumet Area Enforcement Conference was reconvened on December 11, 1968. The conferees reviewed progress by industries and municipalities to abate pollution. Several industries requested schedule extensions. Before granting extensions, the conferees called for inspections of industries which may not meet the originally scheduled completion date. They also established a committee to review present water quality and waste sources within the conference area to establish any need for additional requirements. The conference will be reconvened in late January 1969 to consider findings of the inspection team.

7. Construction Grants

Highlights of this program included the following items:

- a) A meeting was held with officials of the Michigan Water Resources Commission to develop procedures for implementing the details of Michigan's \$335 million water pollution control bond issue. The Commission is now in the process

of developing amendments to its existing legislation in order to perfect its ability to get the bond issue funds to local communities as rapidly as possible. The meeting, which was held in Detroit, is the second meeting that the Regional Construction Grants Program Director and the Deputy Program Director have had with the Commission's staff since passage of the bond issue last month.

- b) A meeting was held with the Director of the Wisconsin Department of Natural Resources in Madison to discuss details of the State's proposed \$144 million water pollution control bond issue. The bond issue details are now being developed for presentation to the Legislature when it convenes next month. The chief purpose of the meeting, which was attended by the Regional Construction Grants Director and the Deputy Program Director, was to insure that the bond issue in its inception would be compatible with the Federal Water Pollution Control Act's construction grant matching provisions.
- c) The Minnesota Pollution Control Agency has been requested by the Governor's office to develop a \$30 million state sewage treatment works construction grant program for presentation to the Governor for further consideration. If the Governor finds the program acceptable, it will be presented to the State Legislature upon reconvening next month. The first contract compliance approval of a project--that of the Southwest Sanitary Sewer District Board, Minnesota, WPC-Minn.-541--involving contracts over \$1 million was received from headquarters. The approval came just short of two weeks following the on-site pre-award compliance conference held in Minneapolis.
- d) One of the chief sponsors of the recently defeated Illinois billion-dollar Natural Resources Bond Issue has announced that a new bill has been drafted for presentation to the Legislature when it opens next month. The details of the bill were not announced, either as to the amount or to the date such a bill would be placed before a referendum.
- e) Notifications were sent to all State water pollution control agencies regarding the reallocation of any unused FY 1968 funds after December 31, 1968. All States in the Great Lakes Region have obligated such FY 1968 funds. This places the States in a position to request reallocation of any unused funds in other States.

- f) Commissioner Moore presented to the Construction Grants Program staff a Unit Award for Excellence of Service by Secretary of the Interior Udall. Individual presentations were also made to each member of the Grants staff.

8. Pollution Surveillance

The final draft report of the Water Quality Monitoring Program for Lake Michigan and Tributary Basin was reviewed by the Monitoring Committee. Comments and corrections were submitted to the Regional Office. It is anticipated that the report will be completed and forwarded to the Conferees early in January.

Staff members of the Lake Erie Basin Office met with City of Cleveland officials to discuss the transfer of water pollution surveillance stations on the Cuyahoga River to the responsibility of the Lake Erie Basin Office.

Final review of the report for the December 11 meeting of the Calumet Area Conference was completed. Copies of the report were sent to the Conferees.

9. Research and Development

Representatives of the Natural Resources Department of the State of Ohio and of Burgess and Niple, Consulting Engineers, visited the Lake Erie Basin Office to discuss an application by the State to demonstrate water quality improvements by low-flow augmentation in the Sandusky River. Mr. Albert Printz, Chief of the Research and Development Branch of the Regional Office attended the meeting. Other possibilities for demonstration grants were also discussed.

The Chief of Field Operations, Lake Erie Basin Office met with Dr. William J. Whalen, Director of Research at St. Vincent Charity Hospital. The subject discussed was a non-membrane type dissolved oxygen micro electrode perfected by Dr. Whalen and his associates at the University of Iowa, and its possible application to our continuous automatic monitoring program.

10. National Water Quality Laboratory - Duluth

Congressman John A. Blatnik visited the National Water Quality Laboratory at Duluth.

H. W. Poston, Great Lakes Regional Director, and Dr. Donald I. Mount, NWQL, met at Newton, Ohio to discuss the objectives of the Fish Toxicology Laboratory and inspected the laboratory facilities.

The final draft of the report of the Committee on Pesticides, established by the Lake Michigan Enforcement Conference, was completed and sent to the Federal Conferee, Mr. Poston.

II. International Program

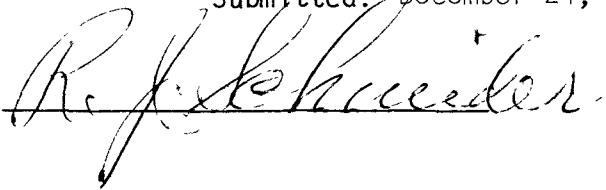
The second draft of the International Joint Commission Report on the Pollution of Lake Erie and Lake Ontario and the St. Lawrence River was completed. The draft will be reviewed by the IJC Advisory Board at its meeting in February. Technical Programs' staff of FWPCA has been actively participating in this work.

III. Administrative Services

<u>Personnel Staffing</u>	<u>October 31, 1968</u>	<u>November 30, 1968</u>	<u>December 31, 1968</u>
A. Total Positions	220	222	223
B. Total Personnel on Board	216	217	216
C. Total Personnel Gains	0	1	4
1. New Hires	0	1	1
2. Transfers	0	0	3
D. Total Personnel Losses	0	0	5
1. Resignations	0	0	4
2. Transfers	0	0	1

Period Covered: November 1968

Submitted: December 24, 1968

REGIONAL DIRECTOR: ¹²⁻¹ H. W. PostonI. Regional Activities1. Pesticide Pollution Gets Attention

Rising concern over the adverse effects of pesticides, especially DDT and Dieldrin, was reflected by statements of public officials, scientists and others during November. The press reports that Governor Knowles of Wisconsin has invited Governors of the other states bordering Lakes Superior and Michigan to join in a conference to plan a fight against pesticide runoff into the Great Lakes. The Wisconsin Department of Natural Resources has called a conference in early December at Madison, Wisconsin aimed at focusing national attention on the pesticide problem. Scientists and researchers from throughout the nation are expected to attend. Fisheries scientists in Wisconsin and Michigan reported finding widespread occurrence of pesticide residues in fish populations. A Michigan State University scientist said large numbers of Coho salmon, a species whose introduction into Lake Michigan has been phenomenally successful, are dying from DDT poisoning.

2. Agricultural Pollution Stressed

An animal waste symposium at the University of Minnesota Farm Campus in St. Paul focussed attention on the growing water pollution problems from those areas. John Badalich, Director of the Minnesota Pollution Control Agency, said that pollution caused by farm animals is one of the major problems in that State's fight for clean water.

3. Regional Work Plans Revised

Revised Regional Work Plans for Fiscal Year 1969 were completed and transmitted to Headquarters.

II. Individual Program Comments1. Water Quality Standards

Action continues toward resolution of items excepted by the Secretary of the Interior when he approved the water

quality standards for several Great Lakes States. This month, attention has focussed on obtaining a clarification of several items in the Minnesota plan of implementation and other improvements requested by the Secretary.

2. Comprehensive Planning

The Lake Ontario Basin report was released at a press conference in Rochester, New York on November 19, 1968. Officiating at the release ceremony were Dwight F. Metzler, Deputy Commissioner, New York State Department of Health and FWPCA Commissioner Joe G. Moore, Jr. Reaction to the report was generally favorable, indicating strong support for the 31-point program it presented. The first of four follow-up reports giving expanded details of the program in subareas of the Lake Ontario Basin was submitted to Washington requesting clearance for publication.

Work continued on preparation of Basin Program Reports for Lakes Huron and Superior.

The Water Quality Work Group, for the Great Lakes Basin Framework Study of water and related land resources, held its second meeting at Chicago, November 22, 1968. Work assignments and schedules were prepared, with representatives of the State Pollution Control Agencies continuing to exhibit willingness for strong participation in the study.

On the Upper Mississippi River Basin Type I Study, report drafts for eight planning subareas were distributed to the Advisory Committee for review. Final drafts, reflecting comments from previous review, were prepared for seven other subareas.

3. Technical Programs

A draft was completed of the FWPCA report on taconite activities on Lake Superior at Silver Bay, Minnesota.

A progress report on surveillance in the Calumet Enforcement Area is being prepared for presentation at a meeting of the Conferees in December.

4. Control of Pollution from Federal Activities

An inventory and status report on wastewater disposal from federal activities in the Lake Superior drainage basin was completed.

Highlights of reviews of permit applications to the Corps of Engineers are as follows:

- a. Installation of water intake and discharge facilities in Lake Michigan at the proposed Kewaunee Nuclear Power Plant, Kewaunee, Wisconsin. Conditionally approved, based on proposed special conditions to insure compliance with future regulations or instructions affecting the work;
- b. Discharge of untreated wastes of the National Lead Company to the Mississippi River at St. Louis, Missouri. Denial of permit to continue these untreated discharges recommended.

5. Enforcement

The Lake Erie Conferees agreed that waste treatment is to be provided by sources in the five States (Michigan, Indiana, Ohio, Pennsylvania, and New York) to achieve at least 80 percent reduction of the total phosphorus loading from their respective States. Within six months, each State will submit a detailed listing of all phosphorus discharges to the basin and where removal will be required. The terminal date for construction of phosphorus removal facilities will remain as 1971.

A reconvening of the Calumet Area Enforcement Conference has been set for December 11, 1968 at the LaSalle Hotel in Chicago. The Conferees will consider progress toward compliance with the December 31, 1968 deadline for control of pollution from the area's industries and municipalities.

Responses have been received from all Lake Michigan Conferees containing listings of waste inventories and potential oil pollution sources. Final drafts of the Pesticide and Thermal and Nuclear Pollution Committee reports have been prepared, and the Monitoring Committee report is nearing completion.

6. Construction Grants

A meeting was held with officials of Michigan Water Resources Commission to discuss the details of implementing the matching-funds program made possible in the State of Michigan by passage of the \$335 million State Bond Issue this month. Michigan expects to certify 30 to 35 projects under this new financing arrangement within the current fiscal year.

State agencies were polled on the subject of expected year by year projects that may be certified for construction grant priority through Fiscal Year 1972. Results of the poll indicate that 1,600 projects could materialize within the five states administered by this Region, if full Federal funding becomes available from now through Fiscal Year 1972.

Special cases concerning proposed small independent sewage treatment plants within metropolitan areas have arisen at two locations. At Warren, Michigan, local officials have vowed they will "fight to the end" to build a separate project independent of the Detroit Metropolitan System. Our recently issued comprehensive report for Lake Erie Basin recommends that Warren be integrated into the metropolitan area system. The Town of Pleasant Hill, Iowa, a suburb of Des Moines, has filed application for a construction grant to build a separate treatment plant. Representatives of the applicant, the City of Des Moines, the Metropolitan Planning Agency and the State Pollution Control Agency have been asked to meet with us to explore the possibility of treating the town's wastes at a central plant.

III. Administrative Services

<u>Personnel Staffing</u>	<u>September 30, 1968</u>	<u>October 31, 1968</u>	<u>November 30, 1968</u>
A. Total Positions	217	220	222
B. Total Personnel on Board	216	216	217
C. Total Personnel Gains	1	0	1
1. New Hires	0	0	1
2. Transfers	1	0	0
D. Total Personnel Losses	2	0	0
1. Resignations	2	0	0
2. Transfers	0	0	0

MONTHLY REGIONAL DIRECTOR'S REPORT GREAT LAKES REGION

Period Covered: October 1968

Submitted: November 14, 1968

REGIONAL DIRECTOR: H. W. Poston

H. W. Poston

I. Regional Activities

1. Bond Issues Approved

A total of five referendums concerning the bond issues for water pollution control were on the ballots in various parts of the Great Lakes Region in the November general election. Four of these issues passed: State of Michigan, \$335 million; State of Ohio, \$120 million; City of Cleveland, Ohio, \$100 million; City of Toledo, Ohio, \$17 million.

2. Illinois Bond Issue Rejected

Illinois ballots contained a proposal for a billion dollar state bond issue to finance water and air pollution and other water resource actions. The bond issue required a favorable vote by a majority of all votes cast in the general assembly contests. It is unofficially reported that a majority of those who voted on the question at all voted favorably. However, it appears that large numbers of voters simply overlooked or ignored the question on the voting machines. State Representative Carl L. Klein, one of the sponsors of the bond issue, is quoted in the press as saying the proposition's "absurd position on the voting machines at the time of a Presidential election caused many voters to miss it."

3. Chicago MSD Cracks Down on Poor Housekeeping

The MSD of Greater Chicago is conducting an intensive campaign against shoreline industries that dump debris into Chicago waterways. Helicopter patrols spot violators and initiate legal action against them. In one case, the patrol cited a huge oil slick fanning out over the canal near the Damen Avenue bridge. Investigation disclosed that this was a case of delayed action water pollution. The source was found to be construction excavation on a site formerly occupied by a tar factory. It is believed that the construction activity is causing material long buried to enter the water.

II. Individual Program Comments

1. Standards

No new activities to report.

2. Comprehensive Planning

Reactions to the recently released Lake Erie report continued strong during October. Comments about the report ranged from adverse to highly favorable. The impact of this report is reflected partly in hundreds of requests for copies.

The Lake Ontario Basin report is now scheduled for release at a press conference in Rochester, New York November 19, 1968. Officiating at the release ceremony will be Mr. Dwight F. Metzler, Deputy Commissioner, New York State Department of Health, representing the State of New York, and FWPCA Commissioner Joe G. Moore, Jr.

Work was begun on the Basin Program Report for Lake Superior Basin.

The Plan Formulation Committee for the Great Lakes Basin Framework Study held its first organization meeting at Detroit, Michigan. Although the committee member representing the Department of the Interior has not yet been designated, Mr. Ownbey of the Regional Office staff attended the meeting as an observer.

3. Technical Programs

Field and office studies are now in progress in the Lake Superior Basin in connection with: 1) a special report on the taconite operation at Silver Bay, Minnesota, and 2) technical assistance for the Lake Superior Basin planning study. First draft of a preliminary report on water movements in western Lake Superior was completed.

Pollution surveillance activities continued in all areas under Federal-State enforcement actions.

A coordinated surveillance program plan, integrating State and Federal activities, is being prepared for the Lake Erie Basin. A similar plan for coordinated surveillance in Lake Ontario Basin is nearing completion.

4. Control of Pollution from Federal Activities

Notifications were sent to all federal agencies having installations in the State of Michigan, concerning the State's recently established policy on phosphorus removal. All installations discharging waste effluents to surface waters were requested to include at least 80 percent phosphorus removal in their plants and to complete facilities for achieving this not later than December 1972.

A statement was prepared regarding thermal discharges to Lake Michigan for presentation at a public hearing called by the Michigan Water Resources Commission for November 7, 1968. The statement, pertaining particularly to the proposed nuclear power plant at Bridgman, Michigan, was subsequently cleared by the Washington office and presented at the November 7 public hearing. Efforts to arrange a joint conference with other USDI agency offices in the Region were only partly successful because of budget and travel restrictions in some of our sister agencies. Conferences were held with Mr. Charles Stoddard, USDI Regional Coordinator, and material was furnished to him for his use in preparing a statement for the November 7 meeting on behalf of the Department of the Interior.

5. Enforcement

No new activities reported.

6. Construction Grants

The latest nationwide assessment of backlog of construction grant applications that need funding in the years ahead, reveals that the Great Lakes Region heads the list. Out of a backlog of some 4,000 projects needed, more than 1,000, or 25 percent of the total, are in the five states for which construction grants are administered by the Great Lakes Region.

Washington headquarters wired all regions for a report on projected FY 1970 projects if the full authorization of \$1 billion nationally is appropriated. Approximately \$150 million would go to the five states in the Great Lakes Region. In our best estimate, full access to this amount could result in the handling of some 455 new projects. Four of the five states would expect to use the full amount of allocated funds. The exception, Iowa, stated that it would be able to use only \$4 million of a \$15.3 million allocation.

Two cases of raw sewage bypass during construction--one actual and one potential--came to attention. The actual case involved a project being constructed at the Rockford Sanitary District, Illinois, where some 35 million gallons a day of raw sewage were bypassed during the month of September. When contacted, the Illinois Sanitary Water Board stated that it is their policy to discourage and disapprove wherever possible, potential or existing proposals for bypassing, but the board found it was not feasible to avoid bypassing in this case. The potential case came to light during examination of the plans and specifications for the proposed plant at Dubuque, Iowa. Specifications for that plant provide for bypassing of raw sewage during construction. The project engineer was contacted and told that such bypassing was not acceptable and he agreed to amend the specifications to insure that sewage is treated during construction.

The Regional Construction Grants Program Director was a principal speaker at a ground-breaking ceremony to launch a 38-mile intercepting sewer project in Pontiac, Michigan. Earlier this year, the Pontiac project was awarded a grant of \$8½ million--the largest ever awarded.

7. Research and Development

The Hammermill Paper Company announced a new paper making process which will enable the plant at Erie, Pennsylvania, to meet Pennsylvania's effluent restrictions.

The Cleveland Program Office Director attended the introduction ceremonies for the Pilot Pollution Control Facility at Sandusky, Ohio. The project consists of two 100,000-gallon balloons submerged in the lake for storage of combined sewer overflows.

A field inspection was made of the storm water control projects at Milk River and Mount Clemens.

8. International Program

Completed copies of the International Joint Commission "Summary Report on Pollution of the St. Marys River, St. Clair River and Detroit River" were received from the printer and forwarded to United States and Canadian agencies for further distribution.

III. Administrative Services

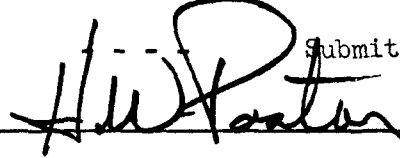
<u>Personnel Staffing</u>	<u>August 31,</u> <u>1968</u>	<u>September 31,</u> <u>1968</u>	<u>October 31,</u> <u>1968</u>
A. Total Positions	219	217	220
B. Total Personnel on Board	219	216	216
C. Total Personnel Gains	0	1	0
1. New Hires	0	0	0
2. Transfers	0	1	0
D. Total Personnel Losses	0	2	0
1. Resignations	0	2	0
2. Transfers	0	0	0

#

Period Covered: September 1968

Submitted: October 31, 1968

REGIONAL DIRECTOR: H. W. Poston



I. Regional Activities

1. Great Lakes Basin Reports

The comprehensive water pollution control report of Lake Erie was released by Commissioner Moore in Cleveland on October 2, 1968. The report presents a plan for water pollution control developed pursuant to Section 3a of the Federal Water Pollution Control Act.

The water pollution control report for Lake Ontario basin has been printed and is ready for official release, which is presently scheduled for November 19, 1968. Publication of the Lake Ontario report jointly by FWPCA and the state pollution control agency of New York will mark a new milestone in federal-state relationships.

Work is in progress on the Lake Superior basin report. The work on this report is handled by the Regional Office and two program offices, Chicago and Minneapolis.

2. Lake Superior Pollution

The recent political campaign message of Senator Gaylord Nelson (D-Wisc.) on television centered around his efforts in the water pollution control program. Spotlighted were recent photographs of discharges to Lake Superior, supposedly from Reserve Mining Company, Silver Bay, Minnesota.

3. Minneapolis Program Office

Northern States Power Company dedicated its new Allen S. King 550,000 kw steam-electric generating plant on the interstate St. Croix River. Approximately \$4.5 million were spent on air pollution control devices and cooling towers. The Minneapolis Tribune's editorial comment is apropos: "An intriguing bit of evidence is the low building adjacent to the plant. It houses research facilities in which NSP and the National Water Control Laboratory will study effects of heated water on the spawning of fish. Some business for a power company! It's a sign of the times."

II. Program Comments

1. Technical Programs

The Regional staff has now completed the draft of the FWPCA report on Lake Superior field studies concerning biological

and chemical findings from surveys of taconite waste discharges in Lake Superior. The report is intended to form a part of the Department of the Interior report being prepared.

The first draft of the joint IJC report (pollution of Lakes Erie, Ontario, and the St. Lawrence River) has now been reviewed by the IJC Advisory Board at its meeting in Niagara.

The IJC report on the St. Marys, St. Clair, and Detroit Rivers has now been printed and is scheduled for release in the near future.

Completed Appendix E "Water Use and Stream Quality" of the Big Muddy River Comprehensive Basin Study and forwarded the necessary printed copies to the St. Louis District Corps of Engineers.

Completed Draft #2 copies of five planning subarea reports for the UMRCBS Type 1 and distributed them for review.

Completed Draft #1 copies of five planning subarea reports for the UMRCBS Type 1 and distributed them for review.

2. Research and Development

The R&D representative reviewed operation of the Reverse Osmosis Field Test unit for processing pulp and paper industry waste effluents. The unit was developed and is operated by Pulp Manufacturers Research League at Appleton, Wisconsin. The unit can produce up to 100,000 fallons per day of reusable water from mill effluents. The demonstration project cost of \$690,000 is financed by FWPCA (70%) and Pulp Manufacturers Research League (30%).

3. Federal Activities

An application for permit was reviewed which was submitted by Dunbar and Sullivan Dredging Company to remove 7,000 yds. of sand from a cellular cofferdam and deposit it on the established dumping ground in Lake Erie. No objections were voiced since it was learned that the sand did not contain any significant pollution materials.

A review was made of an application for permit by the Wisconsin Public Service Company to install a 120-inch I.D. submarine water intake and discharge facilities in Lake Michigan at the site of the proposed Kewaunee, Wisconsin Nuclear Power Plant. Since studies are in progress pertaining to the effects of heated cooling water discharges to large bodies of water, and that the results of these studies will not be known for some time, it was recommended that the permit be granted with the

proviso that pre, during and post construction monitoring be carried out, and that the applicant be required to make modifications to the facilities should the studies indicate the necessity.

4. Pollution Surveillance

The Chicago Metropolitan Sanitary District is using helicopters for aerial surveillance of waterways for evidence of pollution. Any pollution observed is examined immediately and tickets issued to the firms responsible for the pollution. This method of surveillance and enforcement has been given wide publicity in the Chicago newspapers.

A Rochester Program Office employee while working on stream surveillance noted an oil film on Oneida Creek below the Hamlet of Oneida Valley and on the surface of Oneida Lake near the mouth of the creek. This information brought to light the fact that the week before near Oneida Valley a Shell Oil Company gasoline truck had exploded and burned, igniting four nearby gasoline tanks containing 12,000 gallons.

The U. S. Coast Guard reported recurrence of the pollution problem from the Sarnia, Ontario area on Sunday evening, September 15. The light solid particles extended from the vicinity of Algonac. The Ontario Water Resources Commission was notified.

An oil spill by the Ford Motor Company on the Rouge River near Detroit was observed on September 18 by the FWPCA patrol boat and the U. S. Coast Guard. The company immediately began containment and removal operations.

An oil spill on the Chicago Sanitary and Ship Canal was investigated on September 18. The oil was being discharged from a tunnel between California Avenue and the B&O Railroad and covered approximately 1,000 yards of the Canal. The International Harvester Company was suspected as the source of the oil but positive identification of the source could not be made.

An oil spill occurred on September 19 on the St. George Branch of Indiana Harbor Canal. The Sinclair Oil Company and American Oil Company placed a boom across the Canal and pumped five or six truck loads of oil and gasoline from the Canal. Both companies are looking for leaks in their equipment but have not reported the source of the oil at this time.

A Chicago Program Office field crew is sampling harbors on Lake Superior to determine the characteristics of bottom sediments to be dredged in 1969 Corps of Engineers operations. They are also simultaneously collecting Wisconsin tributary

samples for water quality evaluation. Harbors studied were Duluth, Black River, Port Wing, Cornucopia, and Ashland.

An oil slick was spotted on the Cuyahoga River September 18, by field personnel from the Cleveland Program Office. An investigation revealed that the oil was discharged from a storm sewer emptying into Big Creek, a tributary of the Cuyahoga River. The U. S. Coast Guard and local authorities were made aware of the condition.

5. Construction Grants

Reviews of the Wisconsin and Minnesota FY 1969 Program Plans reveal some marked weaknesses in these two State programs, particularly in the Plan presented by the State of Minnesota. Wisconsin was rated marginal or below in several program elements and Minnesota was rated poor in two program elements. All program elements relate to their bearing on the construction grants operation. There is an impressive list of projects requiring construction in Minnesota, but Wisconsin failed to submit any projected list of needs beyond this year. Identifiable 5-year needs in Minnesota consist of 351 projects costing \$117.5 million.

With the approval of the FY 1969 Program Plan for the State of Illinois, immediate action was undertaken to shape up any pending projects ready for grant offers in the State of Illinois. There are about a dozen such projects on which a grant offer can be made in the immediate future.

The Michigan FY 1969 Program Plan was approved several days after the Illinois Plan. However, Michigan has not yet certified for funding any new projects for FY 1969. All indications point to the fact that funded priorities by Michigan will not be issued until after the results of the \$335 million State matching grant bond referendum scheduled for a vote by the electorate in November. The Executive Director of the Michigan Water Resources Commission complained to the Construction Grants Program about the slowness in getting the FY 1969 Michigan Program Plan reviewed and approved by FWPCA. He stated his desire to submit the Plan as early as possible to FWPCA in order to receive permission to undertake the contents of the Plan by the beginning of any particular fiscal year. Michigan's desire to accelerate its program is encouraging.

It was discovered during our field inspection of the Federally-assisted Melrose, Minnesota sewage treatment works project that the contractor was bypassing raw sewage into the Sauk River during construction of a plant expansion. The approved contract documents and the State agency's construction permit specifically required primary and secondary treatment throughout construction. Notification was received during the week of September 23-27 that

the one-week bypassing was terminated. The city was requested to file a report with the Construction Grants Program outlining the actions that will be taken to insure no reoccurrence.

Completion of the processing of ten grant offers to the Metropolitan Sanitary District of Greater Chicago was accomplished. These ten offers, coupled with an earlier grant increase, means that the Chicago Sanitary District has been awarded approximately \$4.2 million in Federal grant funds for FY 1969.

Follow-up action on the status of all active Iowa, Michigan and Minnesota projects was completed the week of September 23-27. This activity is a continuing effort to insure that grant recipients are meeting project deadlines and that the projects are being closed out on a timely basis. Follow-ups in Illinois and Wisconsin will be completed the week of September 30.

A total of 30 grant increases were made to Wisconsin communities to supplement existing grants on ongoing projects. The grant increases amounted to approximately \$2 $\frac{1}{2}$ million and ranged in size from \$3,170 to the Village of Winneconne to \$448,310 to the County of Milwaukee. This raises the Federal grant percentage to 30 percent or 33 percent for all of these Wisconsin projects. The communities may be eligible later for even additional increases up to 50 or 55 percent depending upon whether all Wisconsin projects have been funded under its State matching program in addition to having approved water quality standards.

The State of Minnesota has completed its construction grant priority rankings for this fiscal year. A total of 61 grant applications was received requesting approximately \$15 $\frac{1}{2}$ million in Federal funds in support of total project costs of \$49.6 million. There will be sufficient Federal funds to assist some 25 projects. Eight of these will be in the Twin Cities metropolitan area and the remainder will consist of projects outside of that area.

6. Administrative Services

<u>Personnel Staffing</u>	<u>July 31, 1968</u>	<u>August 31, 1968</u>	<u>September 30, 1968</u>
A. Total Positions	219	219	217
B. Total Personnel on Board	219	219	216
C. Total Personnel Gains	0	0	1
1. New Hires	0	0	0
2. Transfers	0	0	1
D. Total Personnel Losses	0	0	2
1. Resignations	0	0	2
2. Transfers	0	0	0

#

MONTHLY REGIONAL DIRECTOR'S REPORT GREAT LAKES REGION

Period Covered: August 1968

Submitted: September 16, 1968

REGIONAL DIRECTOR: H.W. Poston

R. J. Schreiber (Acting)

I. Regional Activities

1. Storm Overflows Shut Down Chicago's Beaches

All Chicago beaches and those in the northern suburbs of Evanston, Wilmette, Winnetka, Kennilworth, and Glencoee were closed on August 19 for approximately five days after the Metropolitan Sanitary District of Greater Chicago released raw sewage into Lake Michigan to avoid flooding conditions brought on by heavy rains. The incident highlighted a problem plaguing communities around the country in which combined sewer systems are used to carry off both storm water and sewage. In periods of excessive rainfall, the system can't handle the load, necessitating its release to receiving waters before treatment. Vinton W. Bacon, sanitary district superintendent, had proposed a system of deep-tunnel reservoirs for storing the overflow for later treatment, but the district's board of trustees had rejected this \$1.5 billion plan as too costly. On September 3, Trustee Gerald Marks questioned the necessity of releasing the overflow, and asked Bacon for a full report on procedures used. The district kept locks open for six hours in Wilmette Harbor and for five hours on the Chicago River Saturday, August 18. The FWPCA's Chicago Program Office collected chemical and bacteriological samples during the period.

2. Phosphate Removal Would Hike Construction Costs

At a reconvened session of the Lake Erie Federal Enforcement Conference in Cleveland August 26, Dr. David Stephan, acting assistant commissioner for research, estimated that construction costs for sewage treatment plants might increase by 50 per cent if the conferees require 80 per cent removal of phosphorus from wastes. The meeting centered on questions raised by George Eagle, the Ohio conferee, as to the feasibility and necessity of phosphate removal. Eagle, who had been accused of "footdragging" on the issue in an editorial in the Cleveland Press, said that there would be no footdragging on the part of Ohio.

3. Photograph Fish Deformed by Temperature

The National Water Quality Laboratory at Duluth, Minnesota, has successfully photographed white sucker fish larvae deformed by exposure to temperature ranges above and below their level of tolerance. The photomicrographs were taken by aquatic biologists James Tucker and Dr. Kenneth Hokanson. Included in the photos are a normal appearing larvae hatched from eggs incubated at 15 degrees centigrade; a normal six-week-old larvae incubated and reared at the same temperature; a formerly normal six-week-old

larvae deformed by exposure to 30 degrees centigrade for 10 days, and a newly hatched larvae whose curved spine and swelling around the head was caused by exposure in eggs incubated at six degrees centigrade. At this temperature most fry were deformed and died soon after hatching.

4. Giant Algal Bloom Spotted in Lake Erie

A huge bloom of algae covering almost half of the western basin of Lake Erie was first observed by boat operators from the Detroit Program Office the week of August 19-23. They reported it was the most choking concentration of algae they have seen in six years of sampling the area. The bloom, off shore from Toledo, Ohio, and Monroe, Michigan, had dissolved oxygen saturations of 160 per cent at the surface while depth samples registered a 70 per cent lack of oxygen. The filamentous blue-green algae was identified as Aphanizomenon, which is a thick 3,000 filaments per milliliter. The Regional Director also observed the bloom and asked the Cleveland Program Office to conduct aerial surveys and obtain photographs. Biologists say that this particular type of algae gives off a "pig pen" odor when it dies.

5. Highlight Needs in Illinois Bond Issue

A committee issuing literature on the \$1 billion bond issue being submitted to Illinois voters November 5 estimates that expenditures of at least \$2.5 billion will be required in the next 12 years to construct municipal water pollution control facilities. Of this amount, the Metropolitan Sanitary District of Greater Chicago will need over \$1.3 billion, the committee thinks. The sanitary district puts its needs even higher. In a report on construction needs, it says \$2.2 billion is called for in a 10-year cleanup program. Such a plan would provide advanced waste treatment capable of removing up to 99 per cent of pollutants and provide solutions for combined sewer overflow problems, the district maintains. The federal contribution to such a program would be \$452 million. The deputy regional director presented a statement of the FWPCA Regional Office before the Illinois Water Pollution and Water Resources Commission on August 12, pointing out the advantages to municipalities in increased federal grants if the state bond issue passes.

6. Tests Show Rochester Beaches Should Remain Closed

Results of tests conducted the week of August 19-23 by the Rochester Program Office show that the three beaches in the Rochester, New York, area should remain closed because of pollution. The New York State Health Department has indicated that the beaches will not be opened until improvements are made to correct the discharge of combined sewer overflows to Lake Erie and until treatment is improved at the Rochester sewage treatment plant.

7. Meet with National Lead Company on River Pollution

The Regional Federal Activities Coordinator met the week of August 5-9 with officials of Missouri, the Corps of Engineers, and National Lead Company to discuss FWPCA objections to granting of a federal permit to allow construction of an outfall sewer that would discharge untreated industrial wastes to the Mississippi River. The Missouri Water Pollution Control Board has approved the firm's proposal, maintaining that the river can easily assimilate the wastes. The company says it has budgeted \$200,000 for building the outfall and does not intend to spend any more than that amount. The St. Louis Metropolitan Sewer District does not want to accept the company's industrial wastes because of the solids disposal problems that would be created. The Corps of Engineers also opposes the plan and intends to charge the company for any maintenance dredging that has to be done because of a buildup of wastes. The company, located south of St. Louis, discharges 21 million gallons per day of cooling water and paint manufacturing wastes to the Mississippi.

8. State Program Plans Show Scope of Needs

State Program Plans for 1969 call for construction of 772 treatment facilities in Illinois costing \$465 million in the next six years, and 312 projects costing approximately \$408 million in Michigan for a comparable period. Since no state program plans have yet been approved, the Regional Construction Grants Office has not obligated 1969 funds to the states. The FWPCA appropriation for 1969 for construction grants is \$29.2 million compared to \$27.6 million available in 1968. An additional \$1,099,155 has also been made available to the Regional Construction Grants division as a result of redistributed 1967 funds. These allocations come from states outside the Great Lakes region which were unable to use such funds.

II. Individual Program Comments

1. Standards

Minnesota, which is in the process of drafting intrastate water quality standards, is also considering including effluent requirements. The draft calls for secondary treatment for all intrastate discharges.

2. Comprehensive Planning

The water quality work group of the Great Lakes Basin Framework Study, one of 26 teams formed to cover various aspects of a planning study of water and related land resources in the basin, met for the first time August 20 and 21 in the FWPCA Regional

Office. C. R. Ownbey, who is in charge of the regional office's reports and planning section, chaired the meeting, which formed five teams--one for each lake basin. The study was initiated by the Great Lakes Basin Commission, which is coordinating the work.

3. Technical Programs

Inshore water temperatures taken by the Rochester Program Office at bathing beaches in the Rochester vicinity were supplied to the Buffalo District Corps of Engineers after complaints were registered that cold water released by the Corps from a reservoir to enhance trout fishing was having an adverse affect on swimmers.

4. Control of Pollution from Federal Activities

The Corps of Engineers and Coast Guard in Toledo, Ohio, have both requested funds to permit hooking their facilities into the municipal sewer system. The Corps has funds available to pay for the project but the Coast Guard does not. However, Gene Casper, Toledo's Commissioner of Engineering, said that if the Coast Guard will issue a letter of assurance, the city will install the sewer connection and accept payment at a later time.

Of the 2,250 federal installations in the Great Lakes Region, 1,420 are connected to municipal sewage systems; 820 provide their own disposal facilities. The remaining handful do not produce wastes. This information was gathered at the request of headquarters.

The Regional Federal Activities Office has requested two requirements prior to issuance of a Corps of Engineers' permit to Mobil Oil Company to dredge in front of its dock site on the Chicago Sanitary and Ship Canal. The office has asked that the dredging be disposed of on upland property and that the barges used to transport the dredgings be sealed to prevent leakage to the waterway.

5. Enforcement

A severe oil spill, which occurred on the Niagara River August 30, was traced to the Ashland Oil Refinery, according to the Cleveland Program Office. The spill is under investigation by the International Joint Commission in Buffalo, New York, and prosecution appears possible, the Cleveland Program Office thinks.

An engineer from the Cleveland Program Office met the week of September 3-6 with Darrell Allison, district fish management supervisor for the Ohio Division of Wildlife, to try to determine long range effects of a recent gasoline spill that decimated the fish population in the Huron River. The kill reported the week of August 12-16, wiped out the entire fish population, and state game wardens say it might take 15 to 20 years to fully restore the stream. The meeting also was helpful in improving federal-state communications

for putting a contingency plan into operation in case of an oil spill on Lake Erie. The Cleveland Program Office director, representing the American section of the International Joint Commission, also met with Canadian members on September 5 and 6 to decide how emergency equipment can be utilized in dealing with accidental oil spills in the lake.

The Nine Mile Creek Watershed District is planning court action against the city of Hopkins to stop it from bypassing raw sewage to Nine Mile Creek. Hopkins, a suburb of Minneapolis, discharges its sewage to the Minneapolis sewage system but has been bypassing untreated wastes. This is the first time in the state's history that a watershed district has taken such action, according to the FWPCA Minneapolis Program Office. Hopkins had hired a consulting engineering firm to study its sewer system and make recommendations for improvements.

An extremely heavy oil slick was reported on the Rouge River on August 12 by a boat operator with the Detroit Program Office. The FWPCA oil contingency plan was put into operation, with the Coast Guard, Corps of Engineers, and Michigan Water Resources Commission alerted. Some of the oil was contained in a drain immediately downstream from the Wabash Railroad bridge, the program office reports. Source of the spill was not determined, but the Shell Oil Company--at the request of the Coast Guard--hired the Marine Pollution Control Dispersion Corporation to remove the trapped oil.

6. Construction Grants

A record number of Wisconsin communities have filed construction grant applications to build or expand sewage treatment facilities in 1969, with 93 applicants requesting over \$33.5 million in federal aid to launch projects costing in excess of \$67 million. The Fiscal Year 1969 grant allocation for Wisconsin amounts to only \$4.4 million, and the state, in a report on the federal grant program, is sharply critical of the far smaller amount appropriated for the program compared to the sum Congress authorized.

Michigan is considering adopting New York's approach toward use of federal construction grants in which the state has been getting communities to apply for federal assistance of one to two per cent of the cost of a project, with the state supplementing this minimum grant with its own grant funds. This is done for two reasons: 1) Funds contributed by the state are eligible for reimbursement by the federal government when more money becomes available; 2) depressed federal funds can be stretched further. New York is supporting its grants program with a \$1 billion bond issue passed several years ago. If Michigan's \$335 million water pollution control bond issue is approved by voters this November, it may use this method for financing sewage treatment plant construction.

An inspection of the Hennepin, Illinois, sewage treatment plant by a regional construction grants engineer disclosed that electrical service was discontinued when the power company repaired a line, resulting in a stoppage of treatment and the discharge of raw sewage to the Illinois River. While the incident only lasted for two hours, it did point up a potentially serious problem. The construction grants office notified other state agencies of the matter, suggesting that they discuss the situation with utility companies to see if temporary power facilities could be provided as they are for restaurants, hospitals and other public institutions. Michigan and Wisconsin officials promptly replied that steps are being taken to prevent pollution from this unexpected situation.

The largest federal construction grant ever awarded in the state of Minnesota--\$1,607,100--was made to the Southwest Sanitary Sewer District Board at Hopkins on August 28. The grant will be used in construction of approximately six miles of intercepting sewers and represents 30 per cent of the cost of the \$5,357,000 project. The sewers will serve the communities of Eden Prairie, Minnetonka, Deephaven, Eagle Creek, and Prior Lake in the Minneapolis-St. Paul area. The award specifies that no payments are to be made until a secondary sewage treatment plant is built to complete the system.

For the first time, Minnesota has agreed to conduct audits on completed federal grant projects to determine a plant's performance and maintenance at periodic intervals. With the Minnesota agreement, all states served by the regional construction grants office now have primary responsibility for such audits.

A \$220,170 construction grant was released to the village of Itasca, Illinois, after the community and the Illinois Sanitary Water Board took steps to halt the bypassing of raw sewage into Spring Brook Creek during a treatment plant expansion project. Des Moines, Iowa, whose grant money was withheld after it discharged untreated wastes during a similar expansion program into the Des Moines River, has notified the regional construction grants office that another bypass of raw sewage occurred from August 17 through August 20 following heavy rains. The plant is now back in full operation following repairs to a portion of the plant damaged by the storm.

7. Pollution Surveillance

A Detroit Program Office biologist investigated a duck kill in a small canal that enters Lake St. Clair near Mt. Clemens, Michigan, the week of August 5-9. Several ducks were observed dying or disabled along the canal. Cause of death was not immediately determined. The Michigan Conservation Department and the Water Resources Commission are participating in the investigation. The

same week high bacterial counts were reported by the Detroit Program Office at the alternate Detroit sewage treatment plant outfall which discharges to the Rouge River and is being used while modifications are being made to the outfall on the Detroit River. In another incident the same week, patches of a white substance were observed by the FWPCA's patrol boat along a two-mile stretch of the Detroit River upstream from Grassy Island. The sighting was reported to the Michigan Water Resources Commission.

An official of the Earth Resources Division of Honeywell, Inc., met with Minneapolis Program Office personnel the week of August 12-16 to discuss the company's possible development of remote multi-spectral sensing devices that could be used in airplanes or satellites to detect pollution.

A narrow sheen of light-weight oil a half-mile long was sighted along the eastern edge of the Trenton Channel at the south end of Grosse Ile August 20, the Detroit Program Office reports, but dissipated in a short time. The week of September 2-6, an oil slick was sighted on the St. Clair River extending from Sarnia, Ontario, to Stag Island. Samples were collected, and appropriate agencies notified. This type of discharge from the Sarnia area has been frequently reported during the summer, the program office says. The Rochester Program Office also reported two minor oil spills. One occurred the week of August 26-30 on the Barge Canal west of the Genesee River when a 100,000-gallon barge rammed a submerged object, spilling about 1,000 gallons into the water. The oil caused about \$5,000 worth of damage to small boats before it was dispersed. The week of August 5-9, the Coast Guard reported a small spill in the St. Lawrence River near Linda Island. A ship thought to be responsible for a larger spill several weeks before is also suspected of this spill, the Rochester Program Office reports.

A report was received on August 28 by a Regional Office Technical Programs staff member from the Michigan Water Resources Commission that the freighter "Francisco Morazon" was aground on a Lake Michigan reef off South Manitou Island and was leaking its cargo of 6,500 gallons of fuel oil. Some of the oil had caught fire. The Coast Guard dispatched boats from Ludington, Michigan, to investigate. An oil slick was also observed from a plane eight miles northwest of Gary, Indiana, on the same day, but a Coast Guard boat sent to the scene could find no trace of the spill when it arrived in the area.

Aquatic biologists from the National Water Quality Laboratory in Duluth, Minnesota, have been scuba diving near the Reserve Mining Company's taconite processing plant at Silver Bay, Minnesota, in order to conduct aquatic insect counts. An Interior Department task force is seeking to determine if the 59,000 tons a day of

taconite tailings the plant discharges to Lake Superior is causing water pollution. A first draft of its report is to be completed by October 24. A boat operator from the Cleveland Program Office also went scuba diving at Detroit to remove debris that had collected around a water quality monitor intake.

8. Research and Development

The executive office of the President has requested information from the Rochester Program Office on the possible threat of thermal pollution to Cayuga Lake because of a proposed nuclear power plant to be built on its shores. The lake is noted for trout fishing, although the state of New York does not have its waters classified for such an endeavor.

The Rochester Program Office's biology unit has started an investigation of the bottom fauna of Canadice Lake to study the effects on it of natural eutrophication. The natural aging process can be studied because the city of Rochester protects the lake as a source of its water supply.

The Rochester Program Office director represented the FWPCA at a meeting of the Eastern Oswego Basin Regional Water Resources Planning and Development Board at which there was discussion as to the best methods for treating over 100 industries' wastes by the joint facilities of the Onondaga County Department of Public Works. The FWPCA has awarded a \$357,000 research and development grant to determine the most feasible methods. The public works department provides services for 17 sanitary districts, including the city of Syracuse, and most of the effluent produced flows into Onondaga Lake--the most polluted body of water under the program office's jurisdiction.

8. Administrative Services

<u>Personnel Staffing</u>	<u>June 30, 1968</u>	<u>July 31, 1968</u>	<u>August 31, 1968</u>
A. Total Positions	224	219*	219
B. Total Personnel on Board	224	219*	219
C. Total Personnel Gains	20	0	0
1. New Hires	14	0	0
2. Transfers	6	0	0
D. Total Personnel Losses	7	0	0
1. Resignations	7	0	0
2. Transfers	0	0	0

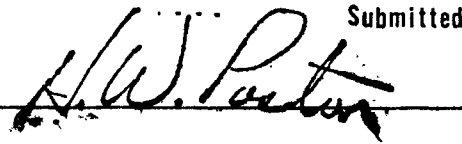
* At Ely, Minnesota, 5 positions transferred to Northwest Region, FWPCA.

MONTHLY REGIONAL DIRECTOR'S REPORT GREAT LAKES REGION

Period Covered: July 1968

Submitted: August 12, 1968

REGIONAL DIRECTOR: H. W. Poston



I. Regional Activities

1. Sign Pesticide Pact

Officials from the four states bordering Lake Michigan signed an agreement Wednesday, July 31, which will seek to curb pesticide pollution of the lake. The agreement calls for an inventory of all possible sources of pesticide contamination throughout the Lake Michigan basin, including that caused by spraying for Dutch elm disease and mosquito control; monitoring of Lake Michigan watercourses; stepped up enforcement of existing laws; accelerated research; an assessment of damage to fish and wildlife, natural resources and scenic beauty, and planning to prevent further pollution of this sort. The regional director attended the signing ceremonies at the Conrad Hilton Hotel in Chicago. The document that state conservation agency heads signed said in part: "Recent findings that DDT was the most probable cause of death of nearly one million coho salmon fry hatched from Lake Michigan-nurtured eggs has brought the problem into sharper focus. We believe that unless timely steps are taken to control persistent pesticides and other economic poisons, Lake Michigan's usefulness will shrink to a fraction of its potential--indeed to the point of disaster."

2. Open 'Pool' in Lake Erie

Cleveland's "swimming pool" in Lake Erie was officially opened by Mayor Carl Stokes in a ribbon-cutting, band-playing ceremony the week of July 29-August 2. The "pool" is a sheet-piling-enclosed area off White City Beach whose waters are treated with disinfectants. Waste discharges near the beach also receive massive doses of chlorination to make the water fit for swimming. Portions of the project were financed by a \$325,000 FWPCA research grant.

3. Senator Observes Trawling Operations

Senator Birch Bayh of Indiana observed alewife trawling operations and shore disposal methods during an inspection tour July 15 at the southern end of Lake Michigan. Bayh was accompanied by federal, state and local officials, including the deputy regional director. In addition to watching the trawlers skim dead alewives from the water, Bayh was shown the profusion of Cladophora algae growing on sheetpiling at the Indiana Port Authority harbor under construction at Burns Ditch. The algal growths are an indication of the lake's degradation.

4. Giant Lake Ontario Oil Spill

An oil slick three miles long and two miles wide was discovered July 20 inching into the head of the St. Lawrence River from Lake Ontario. The spill caused concern that pumping operations by many communities which draw their water supply from the river would have to be suspended. But by the next day the oil had been dissipated, the Coast Guard reported. The Rochester Program Office, which cooperated with the Coast Guard during search operations, reported that choppy seas appeared to have dispersed the oil. The deputy director of the program office advised against using detergents on the oil because of the possibility of killing marine life. In general, he said, the contingency oil spill plan that was put into effect worked well. Source of the spill was presumed to be a passing ship.

5. Contingency Oil Spill Plan Developed

A regional contingency plan to deal with oil spills on the Great Lakes has been developed by the regional technical programs division, and will be incorporated into a national plan. A regional operations team that will operate from the regional office during emergencies has representatives from the divisions of enforcement, technical programs, pollution surveillance, water resources studies, and public information. Development of the plan followed a number of practice drills staged by the Coast Guard in which FWPCA program office personnel took part. The simulated Torrey Canyon exercises were held on each of the Great Lakes.

6. Alewives, Algae Mar Lake Ontario Shores

The Rochester Program Office reports that the annual die-off of alewives was greater in Lake Ontario this year than in years past. Northerly winds drove more numbers than usual ashore, where the dead carcasses piled up with masses of Cladophora algae. The stench from this unsightly scene drove recreationists away from many of the major lakeside parks.

7. Announce Joint Thermal Study

The FWPCA's National Water Quality Laboratory in Duluth, Minnesota, and Northern States Power Company on July 31 announced the start of a study into the effects of heated water on fish spawning. The study will begin in September at Oak Park Heights, Minnesota, on the St. Croix River near the company's Allen S. King generating plant. Second phase of the study will be conducted at the firm's nuclear electric generating plant on the Mississippi River at Monticello, Minnesota, when the plant begins operations in 1970. Forty-eight tanks are being installed in the King plant study to house species of fish native to the St. Croix River, such as walleye, northern pike, large mouth bass, small mouth bass, white bass, channel catfish, white suckers and emerald minnows. The

long-term Monticello studies on the thermal tolerance of fish and fish food organisms will be conducted under natural conditions.

8. Release Portion of Des Moines Grant

Following an inspection of the new sewage treatment facilities at Des Moines, Iowa, the Regional Construction Grants chief agreed to release another \$80,000 of a \$380,000 construction grant. The grant had been held up after the city bypassed raw sewage into the Des Moines river for six weeks starting March 26 while work was conducted on the new facility. A decision on the remaining \$300,000 of the \$600,000 grant will not be made until after an inspection of the completed improvements. City officials were criticized in an editorial in the Des Moines Tribune for not notifying the FWPCA of the sewage bypass and for not seeking suggestions as to how the problem might be remedied. Payments were withheld in the regional office because the project approved by the FWPCA called for "substantially complete" plant operations during construction.

9. Itasca Bypasses Raw Sewage

A \$220,170 construction grant to the village of Itasca, Illinois, was held up after the Illinois Sanitary Water Board notified the regional construction grants office that the village was bypassing raw sewage into Spring Brook Creek during a treatment plant expansion project. The bypassing is in violation of its agreement with the FWPCA, the grants office says.

10. Four Agencies Sponsor Streams Clean-up

The FWPCA Regional Office joined with three other governmental agencies in sponsoring a clean-up program of approximately 25 miles of streams that wind through forest preserves in south Cook County, Illinois. One of the sponsoring agencies, the Cook County Office of Economic Opportunity, hired 100 young men between the ages of 16 and 21 to remove fallen logs, old tires, tin cans and other trash from Thorn, Butterfield and Tinley creeks. The work force was recruited through the Neighborhood Youth Corps and the Youth Opportunity Corps. In addition, the FWPCA hired and trained 10 high school and college student supervisors to lead teams of 10 in the clean-up. Work began July 30 and will continue through August 23. The Metropolitan Sanitary District of Greater Chicago is giving overall direction to the project. The Cook County Forest Preserve District is providing chain saws. The interagency program is similar to those being undertaken in other areas of the country this summer.

11. Award Grants in 'Northern Appalachia'

The Upper Great Lakes Regional Commission was recently formed to

encourage economic growth in the depressed northernmost counties of Minnesota, Wisconsin, and Michigan, an area considered the Appalachia of the North. The commission has been working with the regional construction grants office to obtain supplemental grants on existing FWPCA sewage treatment plant projects. The first two supplemental grants were awarded July 1. A \$60,000 grant went to Nashwauk, Minnesota, while Crystal Falls, Michigan received \$169,740.

II. Individual Program Comments

1. Comprehensive Planning

The New York State Department of Health has agreed to join the FWPCA in publishing a report, "Water Pollution Problems and Improvement Needs--Lake Ontario and St. Lawrence River Basins." The report is now undergoing a final review in FWPCA headquarters in Washington, D. C. There is consensus on all but two of the 31 recommendations in the report. In these instances, the state qualifies its backing. One recommendation calls for achieving 85 per cent removal in secondary treatment by municipalities. The state says it defines secondary treatment as 75 to 95 per cent reduction in biochemical oxygen demand and suspended solids, but that it is encouraging the design of facilities which would achieve 85 per cent removal. The second recommendation to which it adds a qualifying note calls for 80 per cent phosphate removal and, by 1972, 90 per cent reduction of phosphorus in waste discharges for municipalities serving a population of 5,000 or more. State officials have expressed reservations as to whether phosphate removal is the key to curbing the accelerated aging of lakes.

2. Technical Programs

Cuyahoga County was awarded a \$741,350 FWPCA grant the week of July 29-August 2 to experiment with carbon filtration in an attempt to achieve the equivalent of secondary treatment of wastes that its plant discharges into the Rocky River.

The Metropolitan Council of the Minneapolis-St. Paul area has proposed development of a major recreational area in a backwater created by a lock and dam 12 miles below the principal metropolitan sources of pollution of the Mississippi River. One feasible way of avoiding problems from these discharges, the council says, is to pipe the wastes around the recreation site and empty them into the river 20 miles downstream.

3. Control of Pollution from Federal Activities

Construction of a large dike in Cleveland Harbor to contain all of the dredgings from the Cuyahoga River for the next four years is planned and will be located next to a pilot dike that now receives dredged materials. The dikes will be built in conjunction with the

city of Cleveland's plans to expand Burke Lakefront Airport into Lake Erie. The Cleveland Program Office Director attended a meeting on the project the week of July 8-12 with officials of the Corps of Engineers and city. FWPCA Commissioner Joe G. Moore Jr., in Detroit July 10 to address the 2nd Annual Conference of State and Federal Water Officials, boarded the Corps of Engineers' dredge Hoffman to observe how dredged spoils are disposed of in a dike-enclosed area of Grassy Island on the Detroit River.

The Minnesota Department of Conservation has complained that the waste discharge from treatment facilities constructed at the White Earth Indian reservation at Naytahwaush will pollute a trout stream. The complaint was forwarded to the Missouri Basin region where the reservation is located. The Regional Federal Activities Coordinator is investigating further. He has also asked for a conference with a Bureau of Indian Affairs representative after having received information that waste treatment facilities are being designed and built at reservations without approval by the FWPCA.

The regional federal activities office has recommended that the Chicago Coast Guard station use a barge as a holding tank for disposal of wastes while weighing a decision to either relocate the station or build a pumping unit and hook into a city sewer. This arrangement will eliminate the discharge of partially treated wastes to Lake Michigan.

Prior to commenting in favor of an Inland Steel Company's request for revalidation of a Corps of Engineers' permit for a lake fill project at the firm's East Chicago plant, the regional federal activities office has asked: 1) that a barge access opening be located on the Indiana Harbor canal side of the fill area to minimize a pollution threat; 2) that a barrier be provided to prevent pollutants from reaching Lake Michigan; 3) that a sampling program be conducted to determine the effects on the lake; 4) that the waters in the fill area be treated if sampling indicates such a need.

4. Enforcement

FWPCA and Minnesota Pollution Control Agency representatives met on three occasions with officials of United States Steel Corporation in response to a complaint by Representative John Blatnik that a steel plant near Duluth was discharging excessive amounts of oil into the St. Louis River. The Minneapolis Program Office Director and the assistant to the director of the National Water Quality Laboratory in Duluth accompanied George Koonce of the Minnesota Pollution Control Agency on an inspection July 2 and follow-up visits July 24 and 27. United States Steel's American Steel and Wire Division plant was discharging large quantities of oil from a waste treatment lagoon. Work in abating the discharge was slow,

follow-up tours showed. Koonce instructed the company to keep its oil removal pump operating around the clock and, if necessary, place a log boom within the lagoon to hold back the oil. Construction of facilities is underway to prevent future discharges.

The Chicago Program Office responded July 4 to an oil spill on the Sheboygan River, brought about when a Reiss Coal Company dock in Sheboygan, Wisconsin, collapsed under several hundred tons of pig iron and crushed a 12-inch line containing bunker C fuel oil. Two men were dispatched to the scene to determine if clean-up measures were adequate. An American Oil Company boom and Howard Morris Company vacuum truck were brought up from Chicago to contain and remove the oil before it entered Lake Michigan. Straw was also used to absorb the oil. The spill was cleaned up by the late afternoon of July 5, and the oil-laden straw burned in the Sheboygan city incinerator.

A Trumbell Asphalt Company storage tank exploded on July 6 and dumped 500 gallons of asphalt into the Rouge River. Company crews and the Marine Pollution Control Dispersion Corporation began an immediate clean-up of the material from the river. A shore clean-up of asphalt-covered logs and debris continued through the week. The Detroit Program Office notified the Michigan Water Resources Commission of the spill.

5. Construction Grants

A final field inspection by regional construction grants personnel of the East St. Louis, Illinois, primary sewage treatment plant on July 31 revealed mechanical equipment out of service, a grit tank that wasn't working, a wet well in the pumping station filled with floating debris, scum, and oil, heavy scum accumulations in troughs, and splattered sludge stains on the walls and doors of a filter room. The city administration was advised by letter that unless conditions were improved, there was a possibility that federal financial support might be withdrawn.

The Metropolitan Sanitary District of Greater Chicago has adopted a resolution banning combined sewers in new developments, but will still permit their construction in built-up areas of Chicago pending a solution to the problem. The sanitary district has been considering the use of deep underground reservoirs for storing storm overflows from combined sewers for future treatment to avoid polluting receiving streams. Two large combined sewer projects in Chicago were approved by the regional construction grants office following passage of the resolution.

Both Houses of the Illinois legislature passed amendments to the \$1 billion natural resources bond issue which will be voted on this November, eliminating grant and loan provisions for industry for water pollution control facilities. Grants and loans for municipalities for such installations were retained in the measure.

The Milwaukee County Board's five-year capital improvement program envisions \$29 million for sewage treatment facilities and \$81 million for sewers for a total of \$110 million in planned construction.

A grant increase of \$1,161,703 was awarded Dubuque, Iowa, the week of July 22 to support construction of a secondary sewage treatment plant which will discharge to the Mississippi River. The increase hiked the grant, already the largest ever made in Iowa, to \$2,070,420. A stipulation written into the award calls for the city to develop a program for avoiding sewer breaks caused by river traffic. This was because a barge recently slammed into a sewer that extends into the river, causing the discharge of seven million gallons of raw sewage into its waters.

A state construction grants program administered by Wisconsin has pledged over \$3 million to 26 communities during its first year of operations. The payments on the grants will be spread over terms ranging from five to 30 years, with the average annual payment for all projects amounting to a little over \$150,000.

Roland Cornelius was hired as contract compliance and equal opportunity officer. He will work in the regional construction grants section and is charged with seeing that grant projects provide maximum equal opportunity in employment. He will also serve as regional FWPCA equal employment opportunity officer.

6. Pollution Surveillance

The Rochester Program Office began a beach sampling program the week of June 24-28. Three of Rochester's closed beaches are being sampled twice a week, and several other beaches intermittantly. Testing for Salmonella, a group of bacteria that causes intestinal diseases, is being conducted at two of the closed beaches, with samples sent to the Chicago Program Office's microbiology laboratory for tests. A beach sampling program was also launched by the Cleveland Program Office the week of July 8-12 in which nine Lake Erie beaches will be sampled every two weeks for the remainder of the summer.

Heavy, continuous rains in latter June and early July in southeastern Michigan caused record floods in the lower Huron River and many tributaries, forcing a number of sewage treatment plants to shut down because of power failures or flooding. A plant at Loch Alpine was inundated by failure of a dam on a Huron River tributary to hold back the rising waters. A dam on the Huron River below Ann Arbor failed, causing excessive damage to the Ann Arbor treatment plant. Other plants in the area that were temporarily out of service are located at Milan, Saline, and Tecumseh, the Detroit Program Office reports. Basements, businesses and other public businesses were flooded with a mixture of sewage and storm water. Two Detroit Program Office personnel investigated treatment facilities at Loch

Alpine and found that primary treatment units had been restored to service but that secondary treatment equipment would not be functioning for some time. The floods caused unusually high turbidity in the Detroit River, forcing suspension of the program office's sampling runs. High winds that accompanied the storms delayed the cruise of a 31-foot patrol boat which is being used to assist the Cleveland Program Office in a Lake Erie survey. The boat was docked at Erieau, Ontario, until July 3, then brought back to the Grosse Ile Naval Air Station where the FWPCA offices are located.

Bulldozers were used the week of July 1-5 to clean Lake Huron beaches at Michigan's Bay City State Park near the mouth of the Saginaw River of algae and fragmented rock. The lake's shoreline and near shore waters at Port Crescent State Park were clogged with Cladophora algae growths, according to a Detroit Program Office biologist.

An electronic monitor on the Mississippi River below the Twin-Cities, one of three employed by the Minneapolis Program Office to detect pollution, recorded a drop in dissolved oxygen from 3.5 milligrams per liter to 2.0 mg/l in 12 hours the week of July 15-19. The Minnesota Pollution Control Agency was notified and traced the drop to the Minneapolis-St. Paul Sanitary District plant which had reduced treatment from 75 to 40 per cent removal of wastes because of a mechanical breakdown. Repairs were being made.

An oil spill was reported to the Detroit Program Office by the Ontario Water Resources Commission the week of July 29-August 2 along the Canadian side of the St. Clair River which extended for seven miles south of Sarnia, Ontario; in some areas the slick crossed the international boundary. The commission is investigating the spill. The week of July 22-26, the Coast Guard reported large quantities of a white substance being discharged from the Sarnia area to the St. Clair River. The Detroit Program Office informed the commission of the discharges.

The Ohio State Wildlife Division says the recent deaths of some 300 ducks in Lake Erie's Put-in-Bay are due to algae toxicity. Karl Bednarik, state waterfowl expert, told the Cleveland Press that he gathered up some still living ducks and had them examined at the Ohio Department of Agriculture's diagnostic laboratory at Reynoldsburg. Lab technicians found algae in the duck's intestines. The toxic algae was given to mice and they died immediately. The poisoning virtually wiped out the duck population around the South Bass Island region.

7. Research and Development

The Chicago Program Office Director and chief chemist of the radiological unit attended a two-day meeting June 24-25 of the Lake Michigan enforcement conference committee on nuclear discharges and thermal pollution, with the second day devoted to an inspection of

the site of a new nuclear power electric generating plant being constructed by Commonwealth Edison Company on Lake Michigan at Zion, Illinois. Power company officials filled in federal and state officials on the firm's pollution control plans.

A fish kill investigations team is being formed at the National Water Quality Laboratory at Duluth, Minnesota, which will develop standard methods for determining the causes of fish kills, employing both laboratory and field techniques.

Governor Warren Knowles of Wisconsin and the Wisconsin Natural Resources Board toured the National Water Quality Laboratory in Duluth July 17. The governor's party was welcomed by the regional director and briefed by the lab's director on research goals. The regional director and Cleveland Program Office director, who were attending a meeting of the Great Lakes Basin Commission in Duluth, joined 17 other commission members and alternates for a tour of the facilities on July 19.

8. Administrative Services

<u>Personnel Staffing</u>	<u>May 31, 1968</u>	<u>June 30, 1968</u>	<u>July 31, 1968</u>
A. Total Positions	223	224	219 *
B. Total Personnel on Board	211	224	219 *
C. Total Personnel Gains	3	20	0
1. New Hires	2	14	0
2. Transfers	1	6	0
D. Total Personnel Losses	2	7	0
1. Resignations	1	7	0
2. Transfers	1	0	0

* At Ely, Minnesota, 5 positions transferred to Northwest Region, FWPCA.

Period Covered: June 1968

SUBMITTED: July 2, 1968

REGIONAL DIRECTOR: H. W. Poston

H. W. PostonI. Regional Activities1. Second Phosphorus Seminar Held

A second seminar concentrating on available techniques for removing phosphorus from wastes to combat water pollution was held June 26 and 27 in Chicago. Close to 400 persons attended. Emphasis at the second parley was on methods being used by treatment plant operators and chemical firms, with industrial representatives making the majority of presentations. The first seminar, held May 1 and 2 in Chicago, featured FWPCA speakers. The FWPCA sponsored both sessions. They grew out of the recent four-state Lake Michigan Federal enforcement conference which recommended that all municipalities achieve an 80 per cent reduction of phosphorus in their wastes by December 1972 to arrest accelerated aging of the lake.

2. FWPCA Sanitary District Study

A four-month evaluation of the Metropolitan Sanitary District of Greater Chicago by the FWPCA has resulted in 23 recommendations for improving operations. The study was undertaken at the request of the district's board of trustees. While the report credited the district with doing a good job, it urged that its effluent be improved; that a tighter control be exercised over industrial wastes under the administration of a single agency, and that storm overflows from combined sewers be brought under control. It suggested various ways that these objectives could be achieved. The study was undertaken by the FWPCA's Technical Advisory and Investigations Branch at Cincinnati, Ohio. Murray Stein, chief enforcement officer of the FWPCA, presented the report to John E. Egan, president of the board of trustees, at a June 19 press conference in the district's offices in Chicago.

3. Minnesota's Standards Approved

Standards proposed by Minnesota to improve its interstate waters have been approved by Secretary of the Interior Stewart L. Udall, with some exceptions. Udall was critical of the state's failure to include the St. Louis River in Duluth. The Secretary further asked Minnesota to adopt a formal policy to protect existing high quality waters, a request he has made of a number of other states. This is the so-called "anti-degradation" clause which some states

are resisting. Standards of 10 out of 11 states in the Great Lakes Region have now been approved, Iowa being the exception. Nation-wide, Udall's action on Minnesota hikes the figure to 38 state standards approvals. John Badalich, director of the Minnesota Pollution Control Agency, said that hearings will be held on rivers of an interstate nature--such as the Mississippi, Minnesota, St. Croix, Red and Rainy--as well as Lake Superior to inform waste dischargers of what they must do to meet a 1972 compliance date. The Chicago Program Office is preparing a report on progress in pollution control along the St. Louis River for Rep. John A. Blatnik of Minnesota's Eighth Congressional District. The river, which empties into Lake Superior, is contaminated by paper and pulp and steel processing wastes.

4. Hold Simulated Oil Spill Drill

Members of the FWPCA's regional office and Chicago Program Office participated in a simulated emergency oil spill drill June 20. The alert was staged by the Coast Guard at the Indiana Harbor Ship Canal, East Chicago, Indiana. Purpose of Exercise Torrey Canyon was to improve the readiness of the Coast Guard and other agencies to respond to oil spill disasters. The Chicago Program Office has developed a 7-day, 24-hour-a-day answering service to take calls on oil spills. The Detroit Program Office reports that a similar simulated drill was conducted by the Coast Guard in Toledo Harbor the week of June 3-7. A number of regional and program office personnel attended a seminar on spills of hazardous substances June 13 and 14 in Edison, New Jersey. President Johnson has asked Secretary Udall to submit contingency plans covering such spills in each coastal area and other bodies of water by July 31.

5. Close River Because of Explosion Threat

The Detroit River was closed to navigation by the Coast Guard from 8 p.m., June 13 through the morning of June 14 because of seepage into the waters of liquid propylene which posed the danger of an explosion. Some 100 barrels of the substance had escaped from an underground storage area at a Wyandotte Chemicals Corporation plant, according to the Detroit Program Office. The company, which reported the leak to the Coast Guard, sealed the rupture and monitored the river. A gaseous vapor released by the liquid hovered near the river's surface but was dissipated by increased winds. Water pollution caused by the substance was minimal, the program office reported.

6. Trawling Operations Begin

Trawling operations began Friday, June 21, in Wisconsin, Illinois and Indiana to protect approximately 60 miles of Lake Michigan beaches from an invasion of alewives. There

were few alewives to skim off the lake's surface, however, although the Bureau of Commercial Fisheries reported the fish had started to spawn the week of June 24, and a larger die-off could be expected. The skimming program is a cooperative venture between the Federal government and the lake states, with the Federal branch putting up \$250,000 for the experimental program compared to \$62,500 from each of the states. Twelve trawlers, working in teams of twos, are now engaged in the cleanup. Contracts are yet to be awarded by the Federal Water Pollution Control Administration to hire four trawlers to patrol Michigan's waters. The BCF reports that four and five-year-old fish dominate the spawning stocks, although alewives usually perish in their third year. Apparently alewives are living longer because they have little competition for food, according to Ernest D. Premetz, BCF's regional deputy director. The Rochester Program Office reports a bigger than usual alewife die-off in Lake Ontario. The alewives are being washed onto the beaches with clumps of algae, the office says.

7. Plan Holding Tanks on Seaway Vessels

The St. Lawrence Seaway Development Corporation is planning to provide waste holding tanks on all seaway vessels, the Regional Federal Activities office reports. Shore-side disposal and treatment facilities to serve all vessels locking through the Snell Lock, near Massena, New York, will also be installed.

8. Cleveland Sues to Enforce Pollution Control Laws

An attorney for Cleveland Auto Dealer David Blaushild has discussed with George Harlow, Cleveland Program Office Director, the possibility of his testifying in a court hearing on Blaushild's suit against the City of Cleveland for failure to enforce its water pollution control laws. Blaushild has run full-page newspaper ads with coupons which people can mail to city officials to protect water pollution.

9. Bacon Proposes \$380 Million Clean-up

Vinton Bacon, general superintendent of the Metropolitan Sanitary District of Greater Chicago, has proposed issuing \$380 million in bonds to finance a 10-year clean-up program in the Chicago area. Adoption of such a proposal would represent a significant departure from the district's present "pay-as-you-go" method of financing. As a result of reimbursement provisions in FWPCA's construction grants program, the sanitary district appears to be eligible for \$10.5 million in grant money to pay part of \$33 million in construction costs for 17 projects.

10. Michigan Issues Own Construction Grant Funds

For the first time in the Great Lakes Region, a state--Michigan--has issued state construction grant funds. On June 21, Michigan offered 11 communities \$1.3 million to build or expand waste treatment facilities. Such funds become available in Michigan only when all Federal funds have been exhausted. Governor George Romney on June 4 also signed a bill placing a \$335 million water pollution control bond issue before the voters in November. He further approved an accompanying measure to provide state matching grants in the amount of 25 per cent of the cost of a project.

11. House Action on FWPCA Budget

The U. S. House of Representatives has approved construction grants for Fiscal Year 1969 at the same level as 1968--\$203 million. The rest of the appropriation for the FWPCA program--\$88,838,000--is trimmed from last year's \$92,800,000. A House report maintains that the new appropriation plus unobligated balances from previous fiscal years will actually make more money available for the program than in the 1968 fiscal year. The State of Wisconsin has informed the regional construction grants office that it will be making approximately 95 construction grant applications for Fiscal Year 1969--the highest number ever received by the regional office. Wisconsin officials are concerned over the lack of Federal funds because they intend to recommend increases in grant money up to the full 30 per cent permitted under the law for all projects undertaken in the last two years before approving any new projects.

12. Predict Twin-Cities Water Shortage

Future projections by the FWPCA and the Minnesota Department of Conservation show a water shortage in the St. Paul-Minneapolis area by 1980. Dale Bryson, Minneapolis Program Office Director, disclosed this information in a talk at a June 7 conference concerned with the "urban river." Bryson urged that a comprehensive study be made encompassing the three main rivers and the ground water of the area. He said the study should also determine what is needed in the way of future reservoirs and whether available storage reservoirs are being utilized effectively.

II. Individual Program Comments

1. Construction Grants

All Fiscal Year 1968 construction grant funds for Michigan and Wisconsin have been pledged, and the three applications pending for Illinois will exhaust funds for that state. The

last two projects in Iowa and a final one in Minnesota have been approved by state agencies and forwarded to the regional construction grants office. The projects will use up all funds for these two states. According to James O. McDonald, Regional Construction Grants Director, it is possible that all available funds will be committed before the end of the fiscal year.

The City of Nauvoo, Illinois, will begin construction of a sewage treatment works shortly after a six-month delay brought about when the Mormon Reorganized Church of Latter Day Saints filed for an injunction against the project. The church maintained that the treatment works would emit offensive odors near the grave site of its founder, Joseph Smith. A court dismissed the suit on June 5. Nauvoo, located along the Mississippi River in southwestern Illinois, is the spot from where the Mormon exodus to Utah originated. Other followers migrated to Missouri where the Mormon Reorganized Church was established.

The City of Des Moines, Iowa, in protesting the halting of FWPCA payments on a \$600,000 construction grant, has filed a supplemental report saying its six-week bypassing of raw sewage from the treatment plant during construction into the Des Moines River brought very few complaints from downstream water users. The city made no reference to adverse newspaper reports on the matter. Payments are being held up in the regional office because the project approved by the FWPCA called for "substantially complete" plant operations during construction.

Bid figures continue to climb on projects in the metropolitan Detroit area. Bids on a 38-mile interceptor sewer project, sponsored by Oakland County just outside the City of Detroit, have risen 70 per cent over estimates made earlier this year. It was thought that the project would cost \$15 million, but bids submitted have hiked the figure to \$25.8 million. A protracted strike by skilled tradesmen appears to be responsible for the higher bids.

Another construction grant recently awarded to the Milwaukee Metropolitan Sewerage Commission for an intercepting sewer has increased the number of grants to Milwaukee this fiscal year to six, with total grant funds reaching \$2,223,130.

A year ago, the Lincoln-Way Community High School District at New Lenox, Illinois, applied for a construction grant to aid in building a sewage treatment works to serve a school. To be eligible for Federal aid, the applicant must be a municipality. The Regional Construction Grants office asked the state of Illinois for a legal opinion. The recently delivered opinion is that a school district is a "municipality." This ruling could bring a flood of applications in the future.

A \$13 million Genesee County sewage disposal system, dedicated June 13, was supported by a \$1,930,320 FWPCA construction grant. Robert M. Buckley, chief sanitary engineer at the Detroit Program Office, represented the FWPCA at the dedication. The system consists of 50 miles of sanitary sewer interceptors and pumping stations; it will serve 13 municipalities in the metropolitan Flint, Michigan, area. The wastes will be channeled to the Flint waste treatment plant.

2. Enforcement

Emphasis at a progress meeting on the 1965 Lake Erie Federal enforcement conference centered on abatement schedules for municipal and industrial wastes. It was brought out that 70 Ohio municipalities and industries are falling behind the schedule, which calls for treatment facilities to be installed in most cases by 1970 and 1971. Also discussed were disposal of dredgings in the lake; oil and gas well drilling; phosphorus control; beach pollution, and lake surveillance. The conferees could not agree on a percentage figure for removal of phosphorus, such as the 80 per cent removal figure adopted at the Lake Michigan enforcement conference. They decided to take the matter up at a meeting in the near future.

An FWPCA patrol boat observed an oil slick on the Detroit River the week of June 3-7; it was traced to the car ferry

A \$13 million Genesee County sewage disposal system, dedicated June 13, was supported by a \$1,930,320 FWPCA construction grant. Robert M. Buckley, chief sanitary engineer at the Detroit Program Office, represented the FWPCA at the dedication. The system consists of 50 miles of sanitary sewer interceptors and pumping stations; it will serve 13 municipalities in the metropolitan Flint, Michigan, area. The wastes will be channeled to the Flint waste treatment plant.

2. Enforcement

Emphasis at a progress meeting on the 1965 Lake Erie Federal enforcement conference centered on abatement schedules for municipal and industrial wastes. It was brought out that 70 Ohio municipalities and industries are falling behind the schedule, which calls for treatment facilities to be installed in most cases by 1970 and 1971. Also discussed were disposal of dredgings in the lake; oil and gas well drilling; phosphorus control; beach pollution, and lake surveillance. The conferees could not agree on a percentage figure for removal of phosphorus, such as the 80 per cent removal figure adopted at the Lake Michigan enforcement conference. They decided to take the matter up at a meeting in the near future.

An FWPCA patrol boat observed an oil slick on the Detroit River the week of June 3-7; it was traced to the car ferry, "Manitowac," docked near the Ambassador Bridge. The Michigan Water Resources Commission and Coast Guard were notified and samples and pictures taken. A joint investigation is underway.

Detroit Program Office field crews, collecting biological samples from the bottom muds of Lake St. Clair, discovered a fish kill on the lower Clinton River the week of June 17-21, apparently caused by low oxygen levels. The kill was reported to the Michigan Water Resources Commission.

A large oil slick was discovered by two Chicago Program Office surveillance personnn

Pollution Control Agency had been informed and had taken corrective action. The second spill was found to be due to a leaking oil barge on the Mississippi River. The barge was ordered to tie up and pump its contents to another barge when repairs provided were unsuccessful.

Coast Guard patrol aircraft spotted an oil slick on the St. Clair River June 18, and traced the discharge to the Sarnia,

Ontario, area. Samples taken were sent to the Detroit Program Office, and the Ontario Water Resources Commission notified. The Coast Guard reported later that the spill was not extensive and appeared to have been brought under control.

3. Control of Pollution from Federal Activities

The Regional Federal Activities office has recommended that a permit not be issued to fulfill the Baltimore and Ohio Railroad Company's request for the dredging of 40,000 cubic yards of material from Lorain Harbor in Ohio and disposing of it in the open waters of Lake Erie. Laboratory analyses by the Cleveland Program Office show the dredgings to be highly contaminated. The office, however, recommended approval of the Chesapeake and Ohio Railway Company's plans to dredge in Maumee Bay off the Presque Isle docks at Toledo since it intends to place the dredged materials on its upland property.

It was recommended to the Corps of Engineers that a meeting be arranged with the FWPCA, contractor, state of Wisconsin and other interested parties to develop criteria suitable for designed improvements to the Badger Army Ammunition Plant located on the Wisconsin River. The state is holding hearings to establish standards for this intrastate waterway so that the Army cannot refer to interstate standards in planning facilities to meet new requirements.

4. Research and Development

Fry of the blunt-nosed minnow, white sucker and northern pike have been successfully reared in the National Water Quality Laboratory in Duluth, Minnesota. The laboratory has already been successful in getting brook trout to complete their natural spawning act in specially prepared spawning troughs. Work is now in progress to rear the fry of the fan-tail darter, yellow perch, and walleye.

Three representatives of the Raytheon Corporation in Utica, New York, met with Rochester Program Office personnel the week of June 3-6 to discuss the possible use of infrared aerial photography to pick up pollution not visible to the eye. The company is interested in developing techniques for identifying pollution loads, biological growths and measuring chemicals through the use of such photographic methods.

5. Administrative Services

<u>Personnel Staffing</u>	<u>April 30, 1968</u>	<u>May 31, 1968</u>	<u>June 30, 1968</u>
A. Total Positions	223	223	224
B. Total Personnel on Board	210	211	224
C. Total Personnel Gains	2	3	20
1. New Hires	0	2	14
2. Transfers	2	1	6
D. Total Personnel Losses	0	2	7
1. Resignations	0	1	7
2. Transfers	0	1	0

#

MONTHLY REGIONAL DIRECTOR'S REPORT GREAT LAKES REGION

Period Covered: May 1968

Submitted: June 12, 1968

REGIONAL DIRECTOR: H.W. Poston

H.W. Poston

I. Regional Activities

1. Fox River Orders Require Phosphorus Removal

Forty-four pollution abatement orders were issued May 16 by the state of Wisconsin to communities and industries on the lower Fox River. The orders require phosphorus removal at municipal treatment plants for the first time. This requirement resulted from the recommendations of the Four-State Federal enforcement conference on Lake Michigan. Eighteen orders were issued to paper mills requiring them to improve treatment to meet Wisconsin's water quality standards, 13 were issued to municipalities, and the remainder to other industries and one institution. Completion of minor improvements and submission of plans for major improvements are required by October 1, 1968.

2. Receive Bids for Alewife Cleanup

Members of the Alewife Cleanup Technical Committee, an outgrowth of the Lake Michigan enforcement conference, met May 29 in the regional office to open bids for trawling off the lake's beaches. The contracts will be awarded in early June. The committee then plans to hold an orientation course for the trawler operators to prepare them for the job of skimming the surface of the lake of dead alewives. Trawling operations are scheduled to begin the week of June 17, and will protect about twenty miles of each lake state's coastline. A Coast Guard helicopter began reconnaissance flights May 21, to locate areas in the lake with the heaviest concentrations of the dead fish.

3. Rebuttal from Des Moines

FWPCA's protests to Des Moines, Iowa, regarding its bypassing of untreated sewage to the Des Moines River during treatment plant construction have drawn a four-page reply from the city manager. The substance of the reply was that the city, in conjunction with the state water pollution control board, decided against using temporary treatment facilities during construction because of the cost--an estimated \$150,000. A supplemental report has been requested from the city regarding the extent of complaints by downstream users and water use impairment.

4. Planning Grant First for Great Lakes Region

On May 13, FWPCA Commissioner Joe G. Moore Jr., approved the first three grants to be awarded to a planning agency, including one in

this region. The Southeastern Wisconsin Regional Planning Commission will receive \$100,000 for a study of the Milwaukee River watershed, to be completed in 1970. Approval of the grant was recommended by the Great Lakes Regional Office. The grant, to be administered here, represents 20 per cent of the total national appropriation for planning grants in Fiscal Year 1968.

5. Phosphorus Workshop Held

An FWPCA-sponsored seminar focusing on available techniques for removing phosphorus from wastewater was held May 1 and 2 in the Conrad Hilton Hotel in Chicago. The seminar, suggested by Blucher Poole, technical secretary of the Indiana Stream Pollution Control Board, grew out of recent Lake Michigan Enforcement Conference recommendations calling for 80 per cent phosphorous removal. Approximately 270 state and municipal officials, consulting engineers, and other interested persons attended the May workshop. The sessions were moderated by Dr. David Stephan, Director of the FWPCA's Division of Research; Dr. Frank Middleton, Director of the Cincinnati Water Research Laboratory; and Albert C. Printz, Regional Water Quality Standards Coordinator. A second seminar set for June 26 and 27 at the Sheraton-Chicago will emphasize methods of phosphorous removal now being used by treatment plant operators and chemical firms.

6. Udall Commends Poston on Lake Michigan Conference

Secretary of the Interior Stewart Udall has written H. W. Poston, Great Lakes Regional Director, commending him for his part in the Lake Michigan Enforcement Conference held in Chicago in January and reconvened in March. The letter said:

"The recent Conference in the Matter of Pollution of Lake Michigan and its Tributary Basins was, from my view, very much of a success. The agreements reached at the Conference, and in subsequent meetings, represent a long step towards assuring the preservation of the national treasure that is represented in Lake Michigan. I know you will continue to press diligently for the accomplishment of these agreements and their pollution control objectives.

"While many persons contributed to the success of this Conference, it is my personal observation, blended with other information brought to my attention, that your contribution was especially notable. Consequently, I am taking this opportunity to commend you for a job well done."

7. Pennsylvania's Standards Approved

Secretary Udall approved interstate water quality standards for the state of Pennsylvania May 21. An anti-degradation clause has not yet been included in the standards, and clarification of some wording has been requested, but with these reservations, the

II. Individual Program Comments

1. Water Quality Standards

On May 22, the Ohio Water Pollution Control Board conducted a hearing to establish intrastate water quality standards for the Rocky, Cuyahoga, Chagrin and Grand River Basins. Reports presented, including those of the Ohio Department of Health and the Three Rivers Watershed District, concurred with FWPCA's recommendation for tertiary treatment at all major inland plants and phosphate removal at all plants. This includes Akron, and Cleveland's southerly plant. Objections were voiced by industrial groups, particularly to temperature criteria, but the majority of the participants demanded upgrading polluted water and maintenance of high quality water where it now exists. The board will announce final standards and establish compliance schedules within three months. This will complete Ohio's Lake Erie basin intrastate standards, except for a number of small tributaries along the lakefront.

2. Technical Services

Carlyle Pemberton, Regional Director of Technical Programs, met with the Corps of Engineers' Board of Consultants May 2 at Buffalo to discuss the pilot dredging program. The board's interim report recommended that in 1968 the program be expanded to include more sampling and analyses on dredges, in harbors, and in spoil areas, and design and estimated cost of treatment systems for alternate disposal of spoils. The consultants proposed treatment of dredged material during the non-dredging season so that the treated spoils could either be returned to lake waters or be used in other ways.

3. Control of Pollution from Federal Activities

The Office of Emergency Planning requested that the FWPCA make preliminary tornado damage estimates at Oelwein and Charles City, Iowa, following tornados there May 15. Temporary power failures at the sewage treatment plants, and possible damage to one sewage lift station had occurred. It is probable that Public Law 875 will be applied, in which case the FWPCA would be responsible for damage assessments to sewage utilities. If a disaster were declared, the cities would be eligible for grants up to the full cost of restoring their waste treatment system to the level of treatment before the disaster.

The city of Cleveland has applied to the Corps of Engineers for a permit to reconstruct and extend an existing breakwater in order to dump miscellaneous soil and rubbish along the lake. However, the city does not intend to construct the breakwater until after the fill has been completed. Dumping trash in Lake Erie violates the Lake Erie enforcement conference, and possibly the Federal Refuse Act of 1899. The FWPCA has recommended withholding the permit until assurance has been given that permanent dikes would be constructed before any further dumping is permitted, and that only solid, non-deleterious material be disposed of in this area.

4. Enforcement

An oil spill May 2 on the Detroit River was traced to one of the car ferries operating from a dock in Detroit just upstream from the Ambassador Bridge. The spill was reported by the Michigan Water Resources Commission.

Three technical committee meetings stemming from the Lake Michigan enforcement conference were held this month in the regional office. During the first meeting of the monitoring committee May 16, a monitoring system was proposed in which the FWPCA would monitor Lake Michigan, and the states with tributaries near the point of discharge to the lake. A second committee meeting to consider this proposal is scheduled for June 20. On May 17, the first meeting of the pesticide committee was held, chaired by Dr. Donald Mount, director of the FWPCA's National Water Quality Laboratory in Duluth, Minnesota. Representatives to the committee agreed on work assignments for collecting data to be discussed at follow-up meetings June 11 and 12, and July 9 and 10. On May 27, the committee on nuclear and thermal discharges of power plants and reactors, chaired by Francis Kittrell of Cincinnati, met to discuss background information on these discharges and anticipated plant construction in the Lake Michigan basin.

FWPCA patrol boats reported the following discharges after recent rains in the Detroit area: packing house wastes were observed being discharged to the Detroit River at the foot of St. Aubin Street in Detroit; oil, apparently creosol, was being discharged to the Rouge River from the Oakwood pumping station. These spills were reported to the Michigan Water Resources Commission. Packing house wastes were also noticed being discharged to the Detroit River from a drain near Ouellette Street in Windsor, Ontario. This discharge was reported to the Ontario Water Resources Commission.

U. S. Coast Guard personnel at Detroit met with the staff from the Detroit Program Office to discuss emergency operations in the event of major spills of oil or other pollutants in the Detroit area. Plans are being made to acquaint local industry with the problem and to encourage the organization of a local group to handle emergency spills.

A white foam discharge was observed extending about $1\frac{1}{2}$ miles from Zug Island during a routine patrol of the Detroit River. A light film oil slick was also seen extending half a mile from the Ambassador Bridge. This information was reported to the Michigan Water Resources Commission at Pointe Mouillee.

5. Construction Grants

For the second time a \$4,090,000 bond issue for Huron Township's Sewage Treatment Works in Wayne County has been defeated, this time by a margin of 2-1. The project is in the Lake Erie Enforcement Conference area. Continuation of federal grant participation is being reevaluated in light of the second rejection by the voters.

The state of Minnesota has revised its construction grants priority system. Minnesota's system had been criticized because the Minneapolis-St. Paul Sanitary District, which treats half of the state's sewered wastes, has received only one construction grant since the inception of the grant program in 1956. The new priority system provides that the Twin Cities area shall receive funds in at least the same ratio as its population bears to that of the state. The state is now receiving applications for Fiscal Year 1969 grant funds. Beginning July 26, 1968, these applications will be assessed for priority under the new system. The state has also announced a "get tough" policy with applicants that fail to keep deadlines for starting construction specified in their application.

FWPCA's position on a project calling for construction of combined sewers was discussed by the regional construction grants staff with representatives of the Economic Development Administration and the city of Chicago. EDA is considering making a grant on a sewer and utilities project in the stockyards area. However, before it can approve the project, FWPCA must certify that the combined sewers meet local, state and federal water quality standards.

The Illinois Sanitary Water Board will have committed all Fiscal Year 1968 construction grant funds with the submission of two more applications in the near future. Illinois is the second state in the Great Lakes Region to commit all its funds, following Michigan.

The Metropolitan Sanitary District of Greater Chicago has been awarded construction grant increases of \$394,340 for six projects because the projects conform to the comprehensive metropolitan area plan of the Northeastern Illinois Planning Commission. The 10 per cent increase brings total federal assistance to these projects to \$4,337,920.

Facilities to obtain at least 80 per cent phosphate removal are being prepared by the city of East Tawas, Michigan. The original construction grant application for the city called for only primary treatment. The increased cost of phosphate removal facilities will amount to only \$20,000, a 6 per cent increase in the overall cost of construction.

6. Research and Development

A two-day meeting of the taconite study group was held May 23 and 24 in Duluth, Minnesota. The meeting included an inspection trip to the Reserve Mining Company operations in Silver Bay and Babbitt, Minnesota. Commercial fishermen and other interested parties presented their view on the effect of the tailing discharges. Research on taconite by the Chicago Program Office included sampling at the Reserve Mining Company's Silver Bay ore processing plant, and preparing an extensive file and bibliography on the Reserve Mining Company, on other companies using the lake, on the state of Minnesota, and federal agencies.

Louis Breimhurst, deputy director of the Minneapolis Program Office and Albert C. Printz, Regional Water Quality Standards Coordinator, inspected storm and combined sewer research projects at Chippewa Falls, Wisconsin, and at the Minneapolis-St. Paul Sanitary District,

with Darwin Wright of FWPCA Headquarters. Breimhurst will replace Wright as project officer for these two projects, the first of several to be transferred to this region. The inspection was made in response to requests from the grantees for partial payment of the grant.

Two contracts have been awarded in the region for engineering studies of waste treatment, flow augmentation, storage, and other factors bearing on the assimilation of combined sewer overflows. \$127,000 has been awarded the engineering firm of Burgess and Niple for a study of the Sandusky River at Bucyrus, Ohio, while Henningson, Durham and Richardson, Inc., have been awarded a \$285,000 contract to study similar problems at Des Moines, Iowa.

Thermal pollution surveys were conducted at the Commonwealth Edison Plant at Waukegan, Illinois on May 1, May 14, and May 22. Reports of each study are being prepared and submitted to those interested in thermal pollution by the Chicago Program Office.

7. Administrative Services

<u>Personnel Staffing</u>	<u>March 31, 1968</u>	<u>April 30, 1968</u>	<u>May 31, 1968</u>
A. Total Positions	223	223	223
B. Total Personnel on Board	208	210	211
C. Total Personnel Gains	3	2	3
1. New Hires	2	0	2
2. Transfers	1	2	1
D. Total Personnel Losses	0	0	2
1. Resignations	0	0	1
2. Transfers	0	0	1

* * *

MONTHLY REGIONAL DIRECTOR'S REPORT GREAT LAKES REGION

Period Covered: April 1968

Submitted: May 16, 1968

REGIONAL DIRECTOR: H.W. Poston

R. Schneider
ACTING R.D.

I. Regional Activities

1. Begin Alewife Preparations

A \$500,000 operation to protect Lake Michigan's beaches from the alewife invasion this summer got underway with a technical committee meeting in the regional office April 23. Harvesting of the fish is scheduled to begin in mid-June. Sixteen trawlers will operate to protect twenty miles of beaches in each of the lake states. The catch will be pumped into trucks and disposed of on land. Harvesting will be carried on six days of the week, up to 40 operation days. The Federal government is putting up \$250,000 for the operation, with the remainder to be shared equally among the four lake states. Advance reports to the task force from the Bureau of Commercial Fisheries show large numbers of alewives are already being caught in the lake.

2. Spill Spurs Opposition to Oil Drilling

One of Hammermill Paper Company's deep disposal wells at its Erie, Pennsylvania, plant ruptured April 14 because of underground pressure. The plant was able to switch disposal of its wastes to a second well, but liquids previously pumped into the broken well, pouring out at 100 gallons per minute, are being disposed of in Lake Erie. Most public officials are convinced Hammermill is doing all it can to get the well resealed, but the accident is being cited as an example of what can happen by Erie Mayor Louis J. Tullio in his drive to prevent the Pennsylvania Department of Forests and Waters from issuing permits for oil well drilling in Lake Erie. Just a week before the break, Mayor Tullio filed suit in the state capital for an injunction against state issuance of lake drilling permits. In March, a bill was introduced in the state legislature that would strip the Forest and Water Department of its power to grant mineral rights in Lake Erie.

3. Hold Up Des Moines Grant Funds

FWPCA payments on a \$600,000 construction grant to the city of Des Moines for expansion of its treatment plant have been stopped by the Regional Construction Grants Office. During construction, the sewage of the entire city of 250,000 people was dumped directly into the Des Moines River, bypassing all treatment. The regional office has been in contact with state officials to determine whether the discharges are still going on, and whether they can be halted before further damage is done to the Des Moines River. The project approved by the FWPCA called for "substantially complete" plant operations during construction.

4. Nomination Honors Hall

Frank Hall is the FWPCA's nominee for outstanding federal professional employee in the Chicago Metropolitan Area. Four federal employees will be chosen from over 72,000 working in the Chicago Metropolitan Area at the Twelfth Annual Federal Employee of the Year Awards Program May 29 at the Conrad Hilton Hotel. The program is sponsored by the Federal Executive Board of Chicago and the Regional Office of the Civil Service Commission. Hall, planning and program grants officer in the Regional Office and manpower development officer for the Cooperative Area Manpower Planning System (CAMPS) in a sixteen-state region, was recently named regional director of enforcement.

He replaces Grover Cook, who transferred to the Southeast Regional Office in Charlottesville, Virginia, to become enforcement chief there. Hall assumes this position in addition to his other duties.

5. Progress in Reconvened Twin-Cities Conference

At the reconvened session of the Twin-Cities Upper Mississippi River enforcement conference April 30, the major polluter, the Minneapolis-St. Paul Sanitary District, dropped its opposition to conference recommendations and will expand its plant to achieve 90 per cent treatment of wastes. This follows a ruling by the Minnesota Attorney General that a 1963 statute eliminated earlier limitations on the maximum indebtedness of the district. The district had cited this financial limitation as a reason for noncompliance. A Minnesota conferee complained that the state's efforts to control vessel pollution in the conference area were being undermined by what he said was the Coast Guard's failure to require suitable waste treatment facilities as a condition of obtaining federal registration. There were no significant changes in the recommendations as adopted by the conferees. While the sanitary district was given a year's extension to June 1969 to submit preliminary plans and specifications for plant expansion, the conferees are holding the district to the date of June 1971 for completion of improvements.

6. Ohio Moves, Cleveland Balks at Phosphate Removal

The Ohio Department of Health has issued a directive to Lake Erie Basin city officials and consulting engineers, stating that all future plans for treatment plant improvements will have to make provision for phosphate removal. John Wirts, engineer at Cleveland's Easterly Treatment Center, said that Cleveland could provide higher levels of phosphate removal if the State of Ohio required it. However, he expressed the view that phosphate removal is not justified because of its excessive expense, and that the city is not bound to provide it even with the new directive.

7. Life Reporters Here

Correspondent Dick Woodbury and Photographer Alfred Eisenstaedt of Life Magazine visited the Chicago, Milwaukee, Cleveland, and Buffalo areas to obtain material for a forthcoming Life article on water pollution. They were accompanied by personnel from the Regional Office, the Cleveland Program Office, and the IJC Field Office at Buffalo.

8. Michigan Bond Issue

The extent of Michigan voters' interest in clean water will be determined this fall. Most observers feel that a \$335 million bond issue to finance sewer and waste treatment construction will appear on the November ballot. The bond issue was recommended by Governor Romney in his annual state-of-the-State message in January.

9. Question State Grant Funding

Bronson LaFollette, Wisconsin Attorney General, has written Secretary of the Interior Stewart L. Udall criticizing the state construction grant matching program in Wisconsin. LaFollette claimed that the state program called for funding up to \$6 million a year, but that it has received only \$750,000 in federal aid.

II. Individual Program Comments

1. Water Quality Standards

Resolution of several areas of disagreement in Iowa standards was arrived at as a result of a meeting between FWPCA officials and members of Iowa's Water Pollution Control Commission. However, differences still exist regarding temperature, secondary treatment, and the anti-degradation clause recently required by Secretary Udall in all water quality standards.

Ohio has scheduled a hearing May 22 for the purpose of receiving testimony and establishing water quality criteria for the intra-state waters of the Rocky River, Cuyahoga River, Chagrin River, and Grand River basins.

2. Technical Services

The Chicago Program Office participated in the first emergency oil spill investigation of the season in Lake Michigan. Although little oil was found, the incident demonstrated that emergencies can be responded to quickly. A boat and plane were at the scene of the reported spill within two hours after the call was received on April 29.

An industrial waste inventory of the Lake Ontario basin has been completed by the Rochester Program Office. All known separately

discharging industries in the basin--over 300--are included in the inventory, with information on products manufactured, period of operation, water use, wastewater analysis data, and existing and planned treatment facilities.

Four automatic water quality monitors were received by the Chicago Program Office. They will be installed in trailers and used for water quality studies throughout the Lake Michigan basin.

3. Control of Pollution from Federal Activities

Regional Federal Activities office personnel met with representatives of the City of Chicago and the Metropolitan Sanitary District on a proposed interceptor sewer at Monroe Street Harbor that will be used to evacuate vessel wastes. Permanent facilities were to be ready by May 15.

The Federal Activities staff discussed with John Pingle, Atomic Energy Commission representative at Oak Brook, Illinois, information to be obtained by the AEC from its contractors about waste treatment facilities. This information will be forwarded to the FWPCA in the future.

The National Lead Company, St. Louis, Missouri, has requested a permit from the Corps of Engineers to construct an outfall into the Mississippi River to discharge process wastes. These wastes are believed to be highly contaminated. The state has approved discharge of these wastes without treatment, if the plant's sanitary wastes are discharged to the St. Louis Metropolitan Sewer District. FWPCA's information suggests the wastes would cause pollution. The Federal Activities office has recommended that the National Lead Company consider diversion of all wastes except cooling water to the municipal system. A meeting with the Missouri Water Pollution Board is planned to resolve these differences.

The E. I. duPont Corporation has asked the Wisconsin Department of Resource Development for permission to discharge TNT red water wastes into Chaquamegon Bay at Barksdale, Wisconsin. The company proposes to study current, temperature and dispersion of these wastes in deep waters of the bay to justify disposing of the wastes by dilution.

4. Enforcement

A progress meeting of the Lake Erie enforcement conference has been called by Murray Stein, the FWPCA's chief enforcement officer, for June 4 at the Pick-Carter Hotel in Cleveland. Revised reports incorporating data from the 1967 sampling season are now being prepared for the conference by the Detroit Program Office.

Investigation by the FWPCA and the Michigan Water Resources Commission disclosed that a foamy white substance discharged into the Trenton Channel by Monsanto Chemical Company appeared to result from a change in operations within the plant. Monsanto is installing

new pollution control facilities to meet state requirements.

5. Construction Grants

A three-day freeze on all grant offers and grant increases was in effect April 15 through April 17. Because of delay in headquarters approval of new obligations of funds following the freeze, there were no offers for a full week. However, in the following week sixteen increases and offers in the amount of \$834,062 were made.

One of the largest single grant payments made by the Regional Construction Grants Program was awarded to a Genesee County, Michigan, project. The payment of \$972,000, one half of the total grant offer, was in support of a project calling for the construction of intercepting sewers, force mains, and pump stations.

6. Program Grants

Fourth Quarter Program Grant payment requests have been submitted by Illinois, Iowa, and Michigan. Illinois has requested its full allotment of \$405,800; Iowa has requested \$92,135 of its \$119,700 allotment, and Michigan has requested its full allotment plus additional funds made available through reallocation for a total of \$339,972. Minnesota and Wisconsin have not submitted final payment requests as yet. Minnesota has received \$89,640 of its \$149,400 allotment, and Wisconsin has received \$149,760 of its \$198,200 allotment. A total of \$1,077,309 has been certified for payment to the five states thus far in Fiscal Year 1968. The grants aid the states in carrying out water pollution control programs they have developed for the year.

7. Research and Development

Seven projects currently being directed from outside the region are due for reassignment to the Great Lakes Region Research and Development program, as manpower becomes available to handle their administration.

The Rochester Program Office is conducting a study of pesticide effects on East Koy Creek, a trout stream in Wyoming County, New York. Pesticide sprays used by potato growers in the area are thought to be responsible for fish kills which have occurred in past years.

Arrangements between the National Water Quality Laboratory at Duluth, Minnesota, and Northern States Power Company to conduct studies on thermal pollution are being completed. A two-year experiment, using effluent from the Allen S. King Power Plant on the St. Croix River to heat water in tanks, will study the maximum permissible temperature for fresh water fish and their food chains. In the spring of 1969, construction will begin on large ponds at the Monticello atomic plant on the Mississippi River, to study, in addition to similar work, accumulations of radioactive materials in water.

8. Administrative Services

<u>Personnel Staffing</u>	<u>February 29, 1968</u>	<u>March 31, 1968</u>	<u>April 30, 1968</u>
A. Total Positions	215	223	223
B. Total Personnel on Board	205	208	210
C. Total Personnel Gains	0	3	2
1. New Hires	0	2	0
2. Transfers	0	1	2
D. Total Personnel Losses	2	0	0
1. Resignations	2	0	0
2. Transfers	0	0	0

#

PERIOD COVERED: February and March 1968

----- SUBMITTED: April 15, 1968

REGIONAL DIRECTOR: H. W. Poston

H.W. PostonI. Regional Activities1. Plan Parley on Phosphate Control

A workshop on phosphate control will be held May 1 and 2 at the Conrad Hilton Hotel in Chicago, with up to 500 persons expected to attend from around the country. The meeting grew out of the four-state Lake Michigan enforcement conference at which the conferees recommended that municipalities and industries remove 80 percent of phosphorous from wastes to arrest the accelerated aging of the lake. The seminar was suggested by one of the conferees, Blucher Poole, technical secretary of the Indiana Stream Pollution Control Board, in order to acquaint those in the field with the latest techniques for phosphorous removal. Murray Stein, chief enforcement officer of the FWPCA, will open the meeting. Dr. Leon Weinberger, assistant commissioner for research, and his staff are planning a presentation.

2. Lake Michigan Conferees Adopt 26 Recommendations

Conferees at the four-state Lake Michigan enforcement conference reached agreement on 16 conclusions and 26 recommendations March 12. They have been submitted to Secretary of the Interior Stewart Udall for approval. The federal conferee and conferees from Illinois, Indiana, Michigan and Wisconsin reached unanimous agreement after six days of testimony and three open executive sessions. Key recommendations, besides the requirement for phosphate removal, focused on such problems as wastes from watercraft, pesticides, nuclear discharges, oil pollution, dumping of dredgings, combined sewers, and the alewife die-off. The conferees agreed to support an alewife program being developed by the Great Lakes Basin Commission with funds and personnel. The program calls for skimming dead alewives up with trawlers before they reach the shore.

3. Award Grant for Beach Cleanup

A \$325,000 research grant has been awarded Cleveland for a crash program to open the city's beaches this summer. Dr. Leon Weinberger, assistant commissioner for research, and H. W. Poston, Great Lakes Regional Director, FWPCA, had met with Mayor Carl Stokes and other city officials February 26 to discuss the possibility of a demonstration grant to help finance a program developed by city consultants. The program calls for partial enclosure of the beach areas with sheet piling; disinfection of beach waters, and massive chlorination of waste discharges near the Lake Erie beaches.

4. State Opposition to New Financing Grows

State water pollution control agencies in the Great Lakes Basin polled by the regional construction grants office are opposed to a reimbursement provision being eliminated under proposed legislation that would finance construction of waste treatment facilities a new way. Instead of direct grants, the new measure would permit the Federal government to make installment payments on both principal and interest contracts with local agencies to cover the Federal share of waste treatment plant construction. State officials feel the new methods would slow down construction and add confusion to the program. Michigan has indicated it will present testimony on the matter before Senator Edmund Muskie's committee during hearings on the proposed bill.

5. Wild River Hearing Held

FWPCA observers from the Minneapolis Program Office attended a Minnesota-Wisconsin Boundary Area Commission meeting the week of March 11-15 at which a spokesman for the St. Paul District Corps of Engineers presented a statement favoring a dam on the St. Croix River. The commission, however, went on record as backing preservation of the waterway as a national wild and scenic rivers system. The Corps has developed plans for a 100-foot high dam on the upper St. Croix River near Taylor Falls, Minnesota, whose primary objective would be flood control. However, a reservoir which would be created by the dam could also serve as a recreational area for the Twin Cities area, the Corps points out. The 30-mile long, mile-wide reservoir would inundate some 7,000 acres of what is now mostly a wild, forested area. Opponents of the dam proposal say flooding occurs on the average of once a century. Northern States Power Company, a major St. Croix landowner, supports the wild river idea and, with other advocates, claims the dam and reservoir would be incompatible with scenic and wilderness protection.

6. Conference Held to Start Taconite Study

A two-day conference was held March 11 and 12 at the National Water Quality Laboratory at Duluth, Minnesota, to plan a study of taconite wastes discharged into Lake Superior by the Reserve Mining Company's plant at Silver Bay, Minnesota. The study will determine if the taconite tailings do, in fact, constitute pollution. The company maintains that the wastes are made up primarily of sand, although a few preliminary samples tested by the Chicago Program Office indicate the presence of phosphorus, nitrate, organic nitrogen, toxic metals and other substances in the receiving waters. Four Department of Interior agencies, the Coast Guard, Corps of Engineers and state agencies in Minnesota and Wisconsin took part in the meeting, chaired by Charles Stoddard, regional coordinator for the Department of Interior. It is planned to have the

study completed by fall. The week of March 25-29, Chicago Program Office personnel visited the plant at Silver Bay with Bureau of Mines staff members to select sampling sites.

7. Severe Duck Kill on the Niagara River

A duck kill, described as the worst ever, took place the week of March 25-29 on the lower Niagara River. Cause of the die-off was attributed to a spring flushout of the heavy concentrations of oil that contaminate the Buffalo River. Last year, the Penn Central Railroad was fined \$1,500 by the New York State Health Department for polluting the river with oil. All railroad yards in the Buffalo, New York, area have been ordered by the state to disconnect all oil discharge lines that feed into sewers and watercourses, and to install oil treatment equipment.

8. Fight Boils Over Nuclear Power Plant

A proposed nuclear power plant, which Northern States Power Company wants to build on the Mississippi River at Monticello, Minnesota, about 30 miles north of the Minneapolis-St. Paul area, has provoked a wide-spread controversy. The Minnesota Pollution Control Agency has decided to hire consultants to study the effects of possible radioactive contamination. Some residents of Minneapolis-St. Paul, which takes its drinking water from the river, have voiced alarm over a health hazard they fear could come from the radioactive discharge. The power company says the plant, which needs a permit from the state pollution control agency, will release harmless amounts of radiation to the Mississippi that meet Atomic Energy Commission standards. Critics, however, say the AEC limits are much more lenient than those set by the World Health Organization. One of the recommendations of the four-state Lake Michigan enforcement conference is appointment of a committee of Department of Interior and state officials to meet with AEC representatives to develop guidelines for pollution control from nuclear power plants.

9. Ohio Moves Ahead

Water quality standards were conditionally approved for Ohio the week of March 11-15, with most of the sections which Secretary Udall has not approved located in areas outside the Lake Erie basin. The same week, Ohio Governor James Rhodes signed into law a measure which creates the Ohio Water Development Authority which will be empowered to issue revenue bonds for construction of municipal and industrial waste treatment facilities.

10. Styrene Spill Spurs Demand for Legal Action

Representative Richard D. McCarthy (D., N.Y.) has asked Thomas J. Kennelly, acting U. S. Attorney in Buffalo, to see if legal

action should be taken against the Penn Central Railroad for spillage of styrene from one of its tank cars. McCarthy says he wants to know if the Refuse Act of 1899 was violated. A report prepared by Herbert A. Anderson, an FWPCA public health engineer stationed in Buffalo, traces the incident back to a tank car which ruptured the night of February 18, dumping 10,000 gallons of styrene, a highly volatile substance, onto the railroad's property. The styrene trickled into the drainage ditch of the town of Cheektowaga and on through the village of Sloan, entered Buffalo sewers, and passed on into the Buffalo River. Sloan residents began complaining of the odor, and the state health department, upon taking measurements of styrene in the air, found the levels approaching a toxic limit. Anderson's report, which was made available to Representative McCarthy, said the railroad failed to notify state or local officials about the spill. The health department had the railroad erect a barrier across the drainage ditch to keep it from seeping to the towns, but on March 10 the company inexplicably opened the barrier and the remainder of the spilled styrene escaped, this time taking large quantities of oil with it to the Buffalo River. Again, complaints were heard from residents of dizziness, eye and ear irritation, and about the odor.

II. Individual Program Comments

1. Water Quality Standards

The FWPCA regional water quality standards staff began development of revised temperature and dissolved oxygen criteria for submission to Illinois. Acceptance by the state of these criteria would complete Secretary Udall's approval of all waters with the exception of boundary waters. Illinois, however, is resisting proposed criteria for the Mississippi River. It wants a parley involving the other Upper Mississippi River states to achieve uniformity in the criteria. It has also asked for copies of standards approved for Wisconsin and Missouri.

2. Comprehensive Planning

The Great Lakes Regional Office has reviewed and edited the Rochester Program Office's basin-wide report on water pollution problems of the Lake Ontario and St. Lawrence River basins. A revised draft is being prepared to send to the New York State Department of Health, which has co-authored the report, for its review and revisions.

3. Technical Services

A technical programs staff member attended a March 12 meeting of Federal, state and local agencies in St. Louis where plans were developed for a coordinated early warning system to deal with

spills of oil, chemicals, and other hazardous material on the Mississippi River. The early warning system, being developed for Illinois and Missouri, would also alert agencies to shipping accidents, dike failures, and fish kills. A preliminary plan was developed which will be distributed to the various agencies for official approval.

Personnel from the FWPCA Minneapolis Program Office and Minnesota Pollution Control Agency met the week of March 25-29 with Thomas Quirk, a New York environmental science and engineering consultant, whose firm is doing a study to see how the St. Louis River assimilates wastes. Proposed water quality standards for the river, a tributary of Lake Superior, were also discussed. A joint Federal-State project to enlarge the area of study of the river may also be undertaken this summer.

4. Control of Pollution from Federal Activities

U. S. Steel Corporation, after objections by the FWPCA's Regional Federal Coordinator's Office, has located an alternative site to dispose of dredgings from the Black River in Lorain, Ohio. The company had planned to dump the polluted material in Lake Erie. Herbert J. Dunsmore, assistant to the administrative vice-president for engineering, visited the regional office to present the alternative proposal in which the dredgings will be disposed of on a $3\frac{1}{2}$ -acre plot of company property. The regional office intends to notify the Corps of Engineers, which issues the dredging permits, that the new plan is acceptable to the FWPCA.

Three Congressional inquiries have been received about the Dunbar and Sullivan Dredging Company's plans to dispose of dredgings from 14 industrial mooring areas along the Detroit River in Lake Erie. The Regional Federal Coordinator's Office has registered its opposition to the plan with the Corps of Engineers. Seeking information on the project were U. S. Representatives Marvin L. Esch of Ann Arbor, and John D. Dingell of Dearborn, Michigan, and Thomas L. Ashley of Waterville, Ohio.

The Regional Federal Coordinator's Office has asked that assurances be given for provision of facilities to meet vessel pollution control required by the four-state Lake Michigan enforcement conference in issuance of a Corps of Engineers' permit to construct 54 small boat slips in Waukegan Harbor, Waukegan, Illinois.

The Marsan Corporation, a subsidiary of Powered Pipe, Inc., Elgin, Illinois, is submitting a proposal to the Great Lakes Basin Commission which envisions use of a special

high-capacity suction pump that would vacuum alewife carcasses from the water and discharge them into a barge or other holding facility. The company also informed the regional office that it has installed 14 Monomatic toilet units, several holding tanks, grease traps, and other control devices aboard International Harvester Company's only lake vessel, the International. The company says it is providing similar facilities for other Great Lakes commercial vessels.

No objections were raised to a Corps of Engineers' permit application filed by Republic Steel Company to install a scale pit, oil skimmer and waste outfall structure to curb pollution of the Buffalo River in Buffalo, New York. The firm has until July 1971 to have control facilities installed to meet recommendations of the 1965 Lake Erie enforcement conference.

5. Enforcement

A progress meeting of the Upper Mississippi River enforcement conference has been set for April 30 in Minneapolis, Minnesota, at which conferees will assess what progress is being made in carrying out the recommendations of a 1966 Federal enforcement action. Dale S. Bryson, director of the FWPCA's Minneapolis Program Office, met with John Badalich, director of the Minnesota Pollution Control Agency, the week of March 4-8 on the matter. Badalich intends to recommend that effluent standards developed from enforcement conference recommendations be adopted by agency members, Bryson reported. The Minneapolis-St. Paul Sanitary District has been resisting implementation of the recommendations.

A heavy oil slick was observed in the Trenton Channel at Grosse Ile Naval Air Station outside Detroit on March 6. The slick passed downstream within an hour; efforts to identify the source were unsuccessful, according to the FWPCA's Detroit Program Office.

The Des Moines Register has been carrying a series of articles on the effects of the city of Des Moines discharging of raw sewage into the Des Moines River while it finishes a \$6 million enlargement of its sewage plant. The city has been bypassing the plant for eight weeks while the new facilities are being constructed. Reporter Otto Knauth wrote of the results in a March 31 article:

"The valley below Des Moines has the smell of death. It begins at the bypass sewer outfall, a large concrete opening in the river bank just south of the disposal plant. The rushing water, more than a million gallons an hour, has the pleasant sound of a waterfall. But what it contains is sickening. Great chunks of meat packing plant wastes cling to the rocks below the outfall. Animal intestines many feet long trail in the current down the riverDead fish litter the bars....The smell of decay

hovers over all.

"The ruin of the river was decided at a meeting of the city with the Iowa Water Pollution Control Commission a month ago. It was, by law, a secret meeting; the public was barred. There was no one to say 'No.'" Even city officials from Ottumwa, which draws its drinking water from the river downstream from Des Moines, were not allowed to sit in on the meeting. Knauth, in a followup story April 7, reported that while Des Moines officials didn't even give serious consideration to alternative solutions, the city of Rochester, Minnesota, was able to shut its plant down for 13 days of expansion and still provide 50 per cent treatment by installing three pumps that intercepted the bypassed sewage in a boxed man-hole and sent it to the plant's final settling tanks.

6. Construction Grants

Lametti & Sons, Inc., St. Paul, Minnesota, a construction firm, has filed a voluntary non-discrimination program involving six construction grant projects in the state. This is the first time such a voluntary submission has been received, according to James O. McDonald, regional chief of construction grants. The contractor's 20-page statement covers in detail the program he intends to follow to assure minority groups of every opportunity for work. The Associated General Contractors of Iowa have also issued a non-discrimination notice to members and unions with which it has collective bargaining agreements. The policy, a six-month revision of its 1967 **notice**, covers state highway Federal-aid contracts and other direct Federal contracts. Copies of the notice must be posted in conspicuous places available to employees and applicants for employment.

A Michigan House of Representatives committee has reported out a state construction grant bond issue amounting to \$335 million for building waste treatment facilities. A companion measure providing for a 25 per cent state construction grant matching program was also reported out of committee. The bills now await action by the full House membership.

Michigan has compiled a list identifying waste treatment plants and sewers needed by 1980. It estimates the need for 210 new plants, 126 improvements to existing plants, and sewers for 3.5 million people. Cost of the plants would run to \$568 million, with another \$641 million figured for sewers and storm water control systems. Total bill: \$1.2 billion.

The Metropolitan Sanitary District of Greater Chicago is now investigating the possibility of obtaining construction grant money to help finance its proposed \$1.2 billion deep tunnel project. The tunnels would be used to store rain water and sewage coming from combined sewers. Instead of releasing the polluted combined sewer overflow to streams to avoid flooding, it would be retained in deep underground reservoirs to be treated at a later time. The district has been thinking of seeking funds through the Corps of Engineers, but now is considering applying to the FWPCA.

The regional construction grants section reports that in some state water pollution control agencies a lack of manpower is causing a growing backlog of unreviewed plans and specifications. Such plans and specifications must have state review and approval before they can be submitted to the FWPCA.

Minnesota's required sewage treatment works' needs over the next 10 years will amount to \$146 million, according to an estimate prepared by the state's pollution control agency. Over \$100 million is needed in the Minneapolis-St. Paul area alone, the agency says.

A construction grant of \$3.8 million has been awarded to Oakland County, Michigan, to construct a 38-mile interceptor sewer line--the longest ever installed in the Great Lakes region. The line, which will pass through five townships, will hook into the Detroit metropolitan sewage treatment system. The project is scheduled to start by June 30 of this year.

A grant awarded Kankakee, Illinois, for expanding its existing treatment facilities features a lagoon for holding combined and storm sewer wastes prior to discharge to the Kankakee River. The lagooning will provide for at least primary treatment.

Spokesmen for the Metropolitan Sanitary District of Greater Chicago informed the Illinois Water Pollution and Water Resources Commission at a hearing held in March that **it** will need \$1.3 billion in the next 12 years to provide necessary treatment and sewer facilities. The state legislative commission slated the session to learn of needs that might be fulfilled if a \$1 billion bond issue is passed by voters in a fall referendum. Strong opposition to some aspects of the natural resources and anti-pollution bond issue is coming from the Illinois Chamber of Commerce.

Two more construction grants were awarded to the city of Milwaukee, Wisconsin, the week of March 11-18, raising to five the number of grants going to the city during the month. Total Federal grant funds for the five projects amount to \$1,985,360.

7. Pollution Surveillance

Donald J. Casey, who heads the Rochester Program Office's surveillance section, attended a meeting the week of March 11-15 concerning the Rochester Gas & Electric Company's nuclear power plant located 20 miles east of Rochester. The plant, when in operation, will discharge 600 cubic feet per second of cooling water heated to 20 degrees above Lake Ontario's normal temperature. Rather than use an outfall, the company intends to discharge the water through a shoreline jet which, its consultants say, will dissipate the heat better.

8. Research and Development

The National Water Quality Laboratory in Duluth, Minnesota, has set up a mobile lab on the bank of an experimental stream selected near Cincinnati, Ohio, to run toxicity tests on fish. Copper has tentatively been selected as the toxicant to study in the stream because it is such a harmful and frequent pollutant.

Dr. Donald I. Mount, director of the National Water Quality Lab at Duluth, Minnesota, says useful information has been acquired on the effects of subacute copper exposures on different bottom-dwelling aquatic organisms. Growth and reproduction of invertebrate creatures were studied. Copper accumulates in the bottom sediments of lakes in which copper sulfate is used for algae control and exerts an influence on aquatic life.

The Duluth lab has also been exposing yellow perch to thermal shock tests. Yearling yellow perch were subjected to sudden temperature changes and survived. Under natural conditions, the fish experience similar changes in moving from deep, cold water to warmer shallower zones.

The Rochester Program Office has drafted a proposal for a cooperative study of phosphate removal at the City of Batavia's activated sludge plant, where sodium aluminate is planned for use as a coagulant. New York state and the city have expressed a willingness to participate with the FWPCA in the research venture. The plant, built in 1965, is presently removing about 40 per cent of its phosphates.

PERIOD COVERED: December 1967 and January 1968 --- SUBMITTED: February 23, 1968

REGIONAL DIRECTOR: H. W. Poston H.W. Poston

I. Regional Activities

1. Ohio Postpones Off-Shore Gas and Oil Drilling

Ohio has postponed indefinitely bidding on off-shore gas and oil drilling because of a storm of protest by agencies and citizens who fear such activities would increase pollution of Lake Erie. Governor James Rhodes issued a statement in which he said, "...we do not at this time contemplate moving ahead with drilling operations. Ohio citizens are greatly concerned with any activities which would possibly contribute to the pollution of Lake Erie." George Harlow, director of the FWPCA's Cleveland Program Office, who testified at many of the hearings held on the subject, said Canada has 250 gas wells in Lake Erie that cause no known pollution problems but that accidental contamination from oil "is inevitable and becomes more inevitable as drilling increases."

2. Lake Michigan Enforcement Conference Reconvenes March 7

The four-state Federal Enforcement conference called to halt pollution of Lake Michigan will reconvene March 7 at the Sherman House in Chicago, at which time the conferees are expected to adopt specific recommendations and a timetable of abatement. Conferees from Illinois, Indiana, Wisconsin and Michigan and the Federal government adjourned February 7 after hearing six days of testimony. The conference began January 31. The adjournment was agreed to in order to give them time to digest all the evidence presented. The day before the reconvening of the conference on March 6, the conferees, local officials, and civic and conservation groups will tour United States Steel Corporation's Gary Sheet and Tin Works to inspect four new water pollution control systems that have been recently installed.

3. New York Comprehensive Sewer Study in Trouble

A \$186,000 comprehensive sewer study -- designed to set the pattern for disposal development for the next 50 years in Erie County, New York, which includes Buffalo, is the subject of controversy between state, county and local officials. They are attempting to find a pre-publication compromise for the long overdue report. At issue, according to George Harlow, director of the FWPCA's Cleveland Program Office, is whether the problem should be attacked on a regional, watershed basis or by the traditional go-it-alone formula. Greeley & Hansen, Chicago consultants, have recommended consolidation of now separate districts, and construction of large trunk sewers to intercept sewage from wide areas and carry it to a few or perhaps only one treatment plant, which would be located on the Niagara River.

4. Report Completed on Taconite Wastes

The Chicago Program Office has completed a report on the taconite wastes Reserve Mining Company discharges into Lake Superior at Silver Bay, Minnesota. The investigation also focused on the "green water" phenomenon observed near the waste discharges. Laboratory findings indicate high concentrations of color, solids, phosphorus, nitrate, organic nitrogen, chemical oxygen demand, minerals, and toxic metals in the receiving waters. The study includes aerial surveys and photographs.

5. Recommend Provisional Permit for Reserve Mining

Dale S. Bryson, director of the FWPCA's Minneapolis Program Office, and Louis J. Breimhurst, deputy director, attended a meeting in Minneapolis on the revalidation of a Corps of Engineers' permit to Reserve Mining Company. A two-year provisional permit allowing the company to continue the dumping of taconite wastes into Lake Superior was recommended to allow for additional fact-finding. A meeting has been scheduled in Minneapolis for March 11 and 12 to plan for the additional studies. The Federal Power Commission's licensing of the Minnesota Power and Light Company for the operation of five hydroelectric power stations along the St. Louis River was also discussed. The power company at times diverts the entire river flow through a canal to its Thomson Power Station. In addition to the flow problem, the river below Cloquet is severely contaminated by paper mill wastes. Comments and recommendations on the problem were requested by March 1 from the following Department of the Interior agencies: The FWPCA, the Bureau of Sports Fisheries and Wildlife, the Bureau of Mines, the U. S. Geological Survey, the Bureau of Commercial Fisheries, and the Bureau of Outdoor Recreation. The Corps of Engineers and the Minnesota Department of Conservation were also asked for comments and recommendations.

6. Romney Asks for \$335 Million for Water Pollution Control

Michigan Governor George Romney, in his annual state-of-the-State message, recommended state bond issues for water pollution control and recreational facilities. The bond issue would authorize the state to finance \$335 million worth of sewer and waste treatment plant construction.

7. Construction Grants Hit New High

January saw the highest amounts of money in the history of regional construction grants awarded, with 47 offers and 26 increases for a total grant commitment of \$7,694,888. This represents almost one-third of the total construction grant funds available for this fiscal year, according to James O. McDonald, Regional Construction Grants director.

8. Minnesota and Wisconsin Program Plans Approved

Program plans for Minnesota and Wisconsin for 1968 were approved by the FWPCA during the first week in January. The plans show how the states will use FWPCA grants to combat water pollution during the year. With

the plans of Illinois, Iowa and Michigan approved in November, these five states will receive approximately \$1.2 million in grants.

9. Minneapolis Official Raps FWPCA

Kerwin L. Mick, chief engineer and superintendent of the Minneapolis-St. Paul Sanitary District, criticized Federal water pollution control officials December 18 for following a policy of "pitiless publicity." Mick was objecting to a press conference held by the FWPCA December 13 in Minneapolis. The press conference was called because the FWPCA's automatic water quality monitor on the Mississippi River had detected a condition that could result in extensive fish kills this winter. The monitor had registered a sudden drop in dissolved oxygen due to a heavy freeze and a low flow caused by a lack of rainfall. Since pollution loads discharged by the Twin-Cities sewage treatment plants place a heavy demand on oxygen in the river, the situation threatens to imperil fish and other aquatic forms of life that depend upon oxygen. During the course of the press conference, Dale S. Bryson, director of the Minneapolis Program Office, noted that a Federal-State enforcement conference held in February and March of 1967 had set water quality requirements for this stretch of the river.

Sanitary District officials had earlier criticized the FWPCA for giving only conditional approval to a sewer project in which Blaine, Minnesota, would hook up to the district, leading to the Federal Housing and Urban Development administration (HUD) holding up funds for the project. Only conditional approval was given to the Blaine project because the sanitary district was resisting enforcement recommendations. Sanitary district trustees maintained that the district couldn't meet standards for the river because the FWPCA hadn't approved them yet. Bryson, at the press conference, however, pointed out that the FWPCA wanted the district to meet the enforcement requirements even though Minnesota's water quality standards haven't been approved yet. Carlisle Pemberton, Regional Chief of Technical Programs, also attended the conference, as did John Badalich, director of the Minnesota Pollution Control agency.

10. No Fish Kills on Upper Mississippi Yet

Anticipated fish kills on the Mississippi River in the Twin-Cities, Minnesota, area have not materialized as yet. Low river flows because of a lack of rainfall and a freezing of the river would have caused dissolved oxygen in the water to drop because of the heavy demand placed on oxygen by pollution discharges from the Twin-Cities sewage treatment plants. An unusually mild winter, however, has kept the river from freezing so that the oxygen supply which fish and other forms of aquatic life depend upon has not been depleted. In addition, the St. Paul District of the Corps of Engineers reports it could release an additional 300 cubic feet per second to the river from headwaters reservoirs to ease conditions. Dale Bryson, director of the FWPCA's Minneapolis Program Office, says there is still a possibility of a fish kill if the river freezes over.

11. Training Program for Treatment Plant Operators

The Wisconsin water pollution control agency has announced it will start a training program for sewage treatment plant operators early in 1968, with assistance from the Wisconsin Board of Vocational, Technical and Adult Education. A new state law requires that all plant operators be certified as trained operators.

12. St. Louis Buys Land for Treatment Plant Expansion

The Metropolitan Sewer District of St. Louis, Missouri, has acquired close to 75 acres at its Lemay treatment plant. While 60 per cent of the land is to be used for primary sewage treatment, the remaining acreage is being reserved for secondary sewage treatment in anticipation of the Federal government requiring such advanced treatment by 1980, according to an item in the St. Louis Post-Dispatch.

II. Individual Program Comments

1. Water Quality Standards

A meeting was held in Roseville, Minnesota, on January 22 to discuss water quality standards for the St. Louis River. Attending the meeting were officials of the Minnesota Pollution Control Agency, and representatives of waste dischargers to the river. Attending for the FWPCA were H. W. Poston, Great Lakes Regional Director; Albert Printz, Regional Water Quality Coordinator, and Louis Breimhurst, Deputy Director of the Minneapolis Program Office. Thomas Quirk of Quirk, Lawler, and Matusky, consulting engineers from New York City, presented a report commissioned by paper companies discharging to the St. Louis River. Quirk said the pollution load upstream from the paper companies caused depletion of dissolved oxygen in the water when the river experienced low flows. The study is being reviewed by the Minneapolis Program Office. Discussions were also held with the Minnesota Pollution Control Agency on a proposed sampling program for the river.

2. Comprehensive Planning

The Cleveland City Council approved a lease the week of January 29-February 2 to permit work to proceed on creation of an island in Lake Erie to serve as the site of the city's new Westerly Sewage Treatment Plant. Construction of the 45-acre island is a year behind schedule.

3. Technical Services

Information being compiled by the Regional Technical Programs Office shows that the industrial rate of increase in the Lake Erie watershed exceeds the national rate while it approximates the national average in the Lake Michigan basin. This information is based on 1965 figures. Trends in industrial growth and activity are being summarized and analyzed in all major watersheds in the Great Lakes region.

A report by a joint study committee appointed by Governor Harold LeVander of Minnesota and Governor Nils Boe of South Dakota to find ways of coping with the overfertilization of Big Stone Lake was made public the week of

December 4-8. Immediate corrective measures recommended by the committee include: 1) control of runoff from livestock feedlots; 2) improved municipal sewage systems; 3) fencing of streams and watercourses to keep livestock out; 4) improved aquatic weed control programs; 5) a stepped-up program to remove rough fish. The committee also recommended diverting more water into the lake from upstream to flush the lake, and expansion of soil conservation programs. Two recommended long range goals are: 1) development of complete watershed treatment of runoff into the lake; 2) a three-year, \$1.2 million research project to find ways of cutting down the load of nutrients that encourage aquatic weed and algal growths.

The technical advisory committee of the Northeastern Illinois Planning Commission, which takes in six counties in and around metropolitan Chicago, met December 11 to formulate recommendations for qualifying for assistance under the Federal Model Cities and Urban Development Act. In this regard, the committee recommended that a board of consultants be hired to review existing water and sewer planning in the six-county area to determine what studies remain to be done. Carlisle Pemberton, Regional Chief of Technical Programs, represented the FWPCA at the meeting.

The Indiana State Board of Health has been kept informed of a sampling program conducted by the Chicago Program Office to guard against pollution of Lake Michigan by disposing of dredging from Indiana Harbor Ship Canal in a diked-in area of the lake where Inland Steel Company wants to expand its East Chicago, Indiana, plant. The sampling indicates that no dredgings escaped from the enclosed area. The Army Corps of Engineers' dredging of the canal ended December 15.

4. Control of Pollution from Federal Activities

The Regional Federal Activities Coordination Office has joined the state of Ohio in recommending that a water intake of the Village of Kelley's Island in Lake Erie be moved to avoid contamination of its water supply by watercraft that would dock near it after completion of a bulkhead by the Detroit District Corps of Engineers. The regional office also recommended that installation of holding tanks on the vessels and evacuation equipment on shore be made a condition for issuing the permit for bulkhead construction.

The U. S. Forest Service has been requested by the regional office to make monthly reports on progress made to correct deficiencies in waste treatment facilities at the Ojibway Job Corps Conservation Center at Marenisco, Michigan.

Tentative plans that emerged from a meeting held in the regional office with representatives of agencies concerned with vessel pollution are to have Federal vessels and the Naval Training Armory discharge wastes into a sewer that will be connected with a Chicago city sewer. The Coast Guard, because of uncertainty over retaining its Chicago station,

is planning to install detention tanks on its vessels which can be periodically evacuated. The meeting was held the week of January 8-12. Attending were representatives of the U. S. Navy, Coast Guard, Corps of Engineers, City of Chicago, Illinois Sanitary Water Board, and Metropolitan Sanitary District of Greater Chicago.

The Regional Activities Office has recommended against extending a Corps of Engineers' permit to allow the Union Carbide Corporation in Erie, Pennsylvania, to continue to dispose of refuse slag and fly ash in Lake Erie and its tributaries. The office cited recommendations of the Lake Erie Enforcement Conference as a basis for its decision.

Merrill B. Gamet, Regional Federal Activities Coordinator, has recommended to headquarters that the Coast Guard consult with the FWPCA to work out a method for issuing mooring permits with a certification that water craft have adequate waste holding tanks on board, as required by a new Chicago ordinance. At present, the Coast Guard has sole responsibility for issuing permits, but cannot deny them on the basis of inadequate sanitary facilities.

Regional FWPCA officials also met earlier in December on vessel pollution at the Chicago city hall with Richard Pavia, assistant city water commissioner, and representatives from the Navy, Coast Guard, and state of Illinois to see if a joint project could be developed for sewerage Navy Pier. The project would cost between \$75,000 to \$90,000, and would provide waste treatment facilities for the Naval Armory and ships and pleasure boats that dock there. An application for a research and development grant to aid the project will be submitted by Chicago, according to Ralph G. Christensen, Regional Research and Development director.

The Federal Department of Transportation has informed the FWPCA that the St. Lawrence Seaway Development Corporation intends to purchase an oil boom for use at Massena, New York, to contain and recover oil from spills of passing vessels.

The Buffalo District Corps of Engineers has asked for more information regarding the FWPCA's objections to disposal of dredgings from Ohio's Ashtabula River in Lake Erie. The Great Lakes Dredge and Dock Company has taken exception to these objections. The Cleveland Program Office plans to collect samples from the river to show that the dredgings are polluted. The Cleveland office reports that the Southeast Water Laboratory at Athens, Georgia, has requested information on dredging studies, as it is faced with similar political and technical problems of harbor dredging on the Atlantic Coast.

5. Enforcement

The FWPCA's Rochester Program Office reports that New York's new effluent registration law goes into effect in June of this year. It requires the registration with the state of every waste outlet with a capacity of more than 1,000 gallons per day. After June, those municipalities and industries granted a registration permit to discharge to a waterway will be required to provide the state with an analysis of their wastes at prescribed intervals.

An oil spill was reported on the St. Clair River in the vicinity of Marysville, Michigan, the weekend of December 9-10. Field crews from the FWPCA's Detroit Program Office collected samples on the Michigan shore while the U. S. Coast Guard gathered samples on the Canadian side near Sarnia, Ontario. It has not been determined if samples on either side of the river match. The Ontario Water Resources Commission has been notified and will investigate discharges on the Canadian side.

6. Construction Grants

As a result of negotiations between the city of Milwaukee, the Wisconsin Department of Natural Resources and the Regional Construction Grants Office, Milwaukee will have secondary treatment facilities in its South Shore Treatment Plant in operation by 1971--three years earlier than it had originally planned. While negotiations on moving up the installation date were held, no action was taken on three Milwaukee construction grant applications.

A moratorium on Fiscal Year 1967 construction grant funds was lifted the week of December 12 after being in effect since mid-October. The action freed almost \$1.3 million for Wisconsin and Minnesota. A moratorium on Fiscal Year 1968 funds continues, however. The regional FWPCA office has asked all states whether they would be interested in securing re-allotted Fiscal Year 1967 funds from those states that have not used all such funds. Withdrawal of support from five out of seven Iowa construction grants was taken because of failure to proceed with the projects, resulting in the recovery of about \$110,000. Three Michigan projects, bogged down because of uncertainty of local financing, have also been warned of the possibility of grant withdrawals.

Former FWPCA Commissioner James M. Quigley disapproved an appeal by the Metropolitan Sanitary District of Greater Chicago that he reconsider its construction grant application for a district-wide waterway monitoring and telemetering system. The Commissioner again turned down the project because it does not constitute a treatment works as defined in the Federal Water Pollution Control Act.

Storm Lake and Lakeside, two adjoining Iowa communities, are ironing out details for building a joint sewage treatment facility rather than constructing two plants. Both communities had received construction grants to erect their own facilities, but the FWPCA's Regional Construction Grants office had been attempting to persuade them that the only practical approach would be a single facility. The communities apparently have been persuaded.

7. Pollution Surveillance

The first winter mid-lake surveillance cruise of Lake Erie was undertaken by the Coast Guard Ice Breaker Tupelo, beginning January 6. This was the first time sampling was undertaken under the ice of the lake, whose entire western basin as well as other portions were frozen over.

R. P. Hartley, chief of field operations for the Cleveland Program Office, and C. Potos, chief of laboratories, accompanied James B. Kneale of the

Ohio Department of Health, on visits to 17 water treatment plants around Lake Erie. Purpose of the trip was to acquaint water works personnel with a proposed cooperative FWPCA-State surveillance sampling program. Arrangements were made to collect bi-weekly and bi-monthly raw water samples for analysis by state and Federal laboratories.

The annual working draft of an industrial waste inventory for the Lake Ontario basin is being prepared by the Rochester Program Office. New features of the 1968 edition include: inclusion of up to six sets of data on each industry when available; data on raw and finished products and services of each firm; a summary on the status of abatement taken or planned by each industry. Copies of the inventory will be provided to the New York state health department.

8. Research and Development

An FWPCA research grant has been awarded a private firm, Havens and Emerson, to determine the feasibility of constructing a large waste water holding and treatment reservoir in Lake Erie to contain combined sewer overflows. If the concept proves economically feasible, consideration will also be given to using the lagoon for further treatment of wastes from Cleveland's Easterly secondary treatment plant and flows from storm sewers in the eastern section of the city.

Illinois Rep. Carl L. Klein has made two informal proposals for research grants, according to Ralph Christensen, Regional Chief of Research and Development. One would be applied to developing a large, codified map identifying critical pollution problems in Illinois, which Klein says would aid legislators in drafting control laws. His second proposal would be to determine the extent of pollution from strip mining operations in the state.

The FWPCA's Detroit Program Office and the Michigan Conservation Department have undertaken a study of how pollution affects ducks wintering on the Detroit River. Ducks wintering on the river and from an unpolluted upstate area will be compared, with tests by the state game pathologist, and an analysis of oil content in feathers. The Detroit Program Office is making daily oil and grease measurements in the river. Sampling of the Trenton Channel was also started the week of January 1-5.

Dr. Donald I. Mount, director of the National Water Quality Laboratory in Duluth, Minnesota, reports significant progress has been made in reproducing several important fish-food organisms in the lab. "This will permit additional species to be tested in prolonged tests to determine safe concentrations of pollutants and water quality requirements," Mount says. In addition, lake herring and brook trout eggs have hatched. Temperatures above 9° Centigrade during the first days of incubation of herring eggs result in severe abnormalities or death, Mount reports. Food consumption is also a useful indicator of ideal temperatures for cold-blooded animals, he adds. Tests the lab has run on stoneflies show that their food consumption is highest at intermediate temperature ranges.

The FWPCA's Rochester Program Office reports that the New York State Health Department's comments on the office's proposed Oneida Lake restoration project were for the most part negative. The state, according to the program office, even rejects the premise that a reduction in phosphates going into the lake will bring about a decrease in algal growth.

Representatives of Reserve Mining Company met with Dr. Donald I. Mount, director of the National Water Quality Laboratory in Duluth, Minnesota, and Mount's assistant, Michael D. Lubratovich, to discuss the possibility of a research program that would examine the effects of taconite wastes discharged to Lake Superior. The mining company dumps nearly 59,000 tons a day of taconite tailings into the lake at Silver Bay. The firm has been under fire for polluting the lake, although it maintains that the tailings are made up primarily of sand.

9. Administrative Services

<u>Personnel Staffing</u>	<u>October 31, 1967</u>	<u>November 30, 1967</u>	<u>December 31, 1967</u>
A. Total Positions	212	212	212
B. Total Personnel on Board	202	208	208
C. Total Personnel Gains	10	1	1
1. New Hires	2	0	0
2. Transfers	8	1	1
D. Total Personnel Losses	3	2	1
1. Resignations	2	2	1
2. Transfers	1	0	0

<u>Personnel Staffing</u>	<u>November 30, 1967</u>	<u>December 31, 1967</u>	<u>January 31, 1968</u>
A. Total Positions	212	212	212
B. Total Personnel on Board	208	208	207
C. Total Personnel Gains	1	1	0
1. New Hires	0	0	0
2. Transfers	1	1	0
D. Total Personnel Losses	2	1	1
1. Resignations	2	1	1
2. Transfers	0	0	0

####



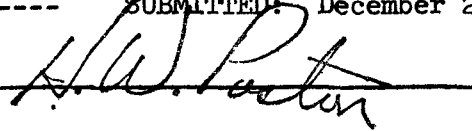
.....



PERIOD COVERING: November 1967

----- SUBMITTED: December 22, 1967

REGIONAL DIRECTOR: H. W. Poston

I. Regional Activities1. Lake Michigan Enforcement Conference Called

Secretary of the Interior Stewart L. Udall has set the opening of a four-state Federal enforcement conference to halt pollution of Lake Michigan for January 31 in Chicago. The conference, involving Illinois, Indiana, Wisconsin and Michigan, will begin at 11 a.m. in the Bal Tabarin Room at the Sherman House. Secretary Udall will serve as chairman of the conference, which involves Lake Michigan and its entire tributary basin of 67,900 square miles. The conference will include areas covered by two previous enforcement conferences: the 1963 one on the Menominee River between Michigan and Wisconsin, and the one initiated in 1965 to abate pollution at the southern end of the lake. Udall, in responding to the request of Governor Otto Kerner of Illinois for a four-state conference, said: "No resource problem in the country is more important than the saving of Lake Michigan."

Governor Kerner wired the Secretary on November 22 to request the conference. Kerner made the request after an earlier effort on his part to get the governors of the other three states together to discuss the problem failed.

2. Experimental Dredging Sites Visited

Federal Water Pollution Control Administration officials accompanied U. S. Army Corps of Engineers' representatives on a tour of experimental disposal sites for harbor and channel dredgings the week of November 13-17. James M. Quigley, FWPCA Commissioner, and Brig. General H. G. Woodbury headed the inspection party, which visited six locations around the Great Lakes where dredgings are being disposed of behind diked-in areas to avoid dumping them into Lakes Erie and Michigan. The party visited projects in Buffalo, Toledo, Cleveland, Detroit, Chicago, and East Chicago, Indiana. The Corps reported that it cost \$6.60 a yard to dispose of dredgings behind a diked area at the mouth of the Buffalo River compared to only 40 cents a yard at Toledo. The reduced costs are attributable to a hopper dredge used in Toledo which has a pump on board that permits it to pump dredgings from the bottom and then behind dikes, rather than having to barge in the material. Other officials making the tour included: H. W. Poston, Great Lakes Regional Director, FWPCA; Stanley Cain, Assistant Secretary for Fish, Wildlife, and Parks, and Brig. General Robert Tarbox, division engineer of the North Central Division of the Corps.

3. Minnesota Attacks Federal "Intervention"

The Minnesota Resources Commission, while discussing expansion of its role in water pollution control at a meeting November 17, attacked the Federal government for "unwarranted Federal intervention in state matters without regard to the state's needs" in connection with establishment of water quality standards for interstate streams. John P. Badalich, the commission's director, requested legislation covering a state grants program for construction of sewage treatment plants; regulations controlling watercraft wastes, and substantial budget and manpower increases to contend with pollution control problems. Robert J. Schneider, Deputy Regional Director, discussed the FWPCA's program and how it relates to Minnesota with the commission.

4. \$500 Million Clean-Up in Pennsylvania

The Pennsylvania Sanitary Water Board has started setting priorities for projects to be funded with a \$500 million bond issue to clean up the state's waterways. One of the state's policies will be the awarding of grants on the basis of a comprehensive watershed clean-up as opposed to paying for scattered treatment facility projects. The state has also adopted a schedule for holding hearings to establish intrastate stream standards.

5. Grants Personnel Assigned by Sanitary District

An engineer and an assistant have been assigned full-time by the Metropolitan Sanitary District of Greater Chicago to obtaining the maximum amount of Federal and state grants possible for construction projects. The two men, Jacob D. Dumelle, Assistant Chief of Maintenance and Operation, and Richard Murphy, met with Regional FWPCA construction grants personnel to discuss a number of pending grant projects.

6. Dredging in 1968

A Great Lakes dredging program for 1968 was discussed November 6 in the FWPCA Regional Office with the North Central Division Corps of Engineers, led by Brig. General Robert Tarbox, division engineer, and Regional Technical Programs personnel. Although agreement was not reached on a 1968 dredging schedule, the Regional Office agreed to review the Corps' list of proposed projects and indicate the ones where objections would be made to disposal of the dredgings in open lake waters.

7. Big Stone Lake Program Report Completed

Minnesota and South Dakota officials have completed a joint report which recommends a program to combat pollution of Big Stone Lake, a boundary waterway plagued by excessive growths of algae. The governors of the two states have received copies of the report.

The Rochester Program Office, in making plans for the coming years, says most comprehensive program plans will be completed by the end of Fiscal Year 1968. Major tasks for Fiscal Year 1969 are listed by the office as: pollution surveillance, technical assistance in beach surveys, waste surveys, industrial inventories, oceanographic evaluations, and the Oneida Lake restoration project. The lake is plagued by excessive growths of algae which are over-fertilized by pollutants. In Fiscal Year 1969, the program office expects to start studies on nutrient control, combined sewers, and pollution caused by urban and rural runoffs.

3. Technical Services

Information is being analyzed by the Regional Technical Programs Office on how efficiently industry in the Upper Mississippi River Basin uses this water supply. Between 1959 and 1964, major Illinois industries showed considerable improvement in the efficient, economical use of water, the office reports.

Personnel from the Regional Technical Programs Office and Chicago Program Office continue to sample water in and around Inland Steel Company's lake fill project on Lake Michigan, where dredgings from Indiana Harbor Ship Canal are being disposed of behind bulkheads. The dredging operations are part of the U. S. Army Corps of Engineers' channel projects. The Chicago Program Office's chemistry laboratory received 21 water samples and five bottom sediment samples taken from this area, near East Chicago, Indiana, during the week of November 6-9. The sampling is to guard against seepage of the polluted dredgings to Lake Michigan. Arrangements have been made to report test results to the State of Indiana.

The Regional Technical Programs Office is compiling information on fertilizers consumed by Great Lakes states. A recent report by the U. S. Department of Agriculture shows that the use of phosphorous fertilizers increased 68 per cent in Illinois and 76 per cent in Iowa between 1959 and 1964. Much larger increases took place in the use of nitrogen as fertilizer. These fertilizers, when washed from the land into water, speed the growth of algae and the aging of lakes.

4. Control of Pollution from Federal Activities

The Minneapolis Office of the Bureau of Sports Fisheries and Wildlife has requested information on pending application for revalidation of a Corps of Engineers dumping permit for Reserve Mining Company at Beaver Bay, Minnesota. The mining firm, which dumps taconite tailings into Lake Superior, has been under fire from the state of Wisconsin, which has strenuously objected to revalidation of the permit. The Bureau of Sports Fisheries and Wildlife has asked for results of a sampling program conducted by the Chicago Program Office in an area where the tailings are dumped.

The Great Lakes Dredge and Dock Company has applied to the U. S. Army Corps of Engineers for a permit to dredge a harbor docking area at Ashtabula, Ohio, and dispose of the dredgings in an authorized dumping area of Lake Erie. The Cleveland Program Office says these bottom materials are grossly polluted. The Regional Federal Activities Office has recommended that an alternative disposal site for the dredgings be found.

The Wisconsin Electric Power Company has also asked the Corps' Chicago District to revalidate a permit issued for improvements to the harbor at Port Washington, Wisconsin. Information has been requested by the Regional Office as to whether the initial permit allows dumping of dredgings into Lake Michigan. If it does, an FWPCA investigation will be required to determine if the bottom sediments in the harbor are polluted.

The St. Paul Port Authority has applied for a permit to dredge four million cubic yards of material from the Mississippi River near South St. Paul, Minnesota, to permit docking of barges and to fill in a flood plain near Pigs Eye Lake at South St. Paul. The Minneapolis Program Office reports the only problems would be the resuspension of nutrients and possible odors resulting from dredging and fill operations. No objections were made to the Corps of Engineers over granting of the permit.

A representative of the American Ship Building Company in Lorain, Ohio, visited the Regional Federal Activities Office to discuss an extended aeration package treatment plant which has been designed for installation on ore boats and other cargo vessels the company builds. In this regard, the Regional Federal Activities Office also recommended to the Corps of Engineers that dockside facilities for taking wastes off vessels be included in improvements proposed for Dunkirk Harbor, New York. The Corps is disposing of dredgings behind retaining dikes in the harbor, and wants to provide facilities for pleasure craft.

The Metropolitan Sanitary District of Greater Chicago wants to install a sewer tunnel under and across the Cal-Sag channel, and has applied to the Corps of Engineers for a permit. The Regional Federal Activities Office has asked for information as to whether or not combined sewage would be carried in this sewer in violation of state of Illinois prohibitions against any new combined sewers being built. The project also includes an emergency outfall which runs directly to the channel; this would mean discharge to the channel of raw combined sewage during heavy rains.

Plans for additions to the waste treatment facilities at the Joliet Army Ammunition Plant have been approved by Regional Federal Activities Office. The additions will provide a higher degree of treatment at the main treatment plant. The State of Illinois has not yet commented on the plans.

5. Enforcement

A barge loaded with 600,000 gallons of asphalt was damaged in heavy seas off Harbor Beach, Michigan, November 14. The barge was towed to the Harbor Beach Refuge Harbor for repairs to its hull. None of the asphalt escaped into the water from the damaged hull, the Detroit Program Office reports. The U. S. Coast Guard is investigating the incident.

6. Construction Grants

A grant application from Genoa, Wisconsin, was returned to the state's water pollution control agency because it fails to conform with the State Program Plan, which calls for secondary treatment for the community's sewage wastes. The state agency says the application will be resubmitted shortly, with plans for secondary treatment of wastes.

Six Iowa communities, which have encountered financial difficulties in meeting starting construction dates for building sewage treatment projects backed by Federal grants, have been sent withdrawal notices by the Regional FWPCA Construction Grants Office. The grant funds involved in the projects total \$131,160. Other projects in the Great Lakes Region that have failed to meet starting dates are also being investigated.

A recent bid tabulation on the DeKalb, Illinois, Sanitary District sewage treatment works project disclosed that project costs show hardly any increase as a result of Federal construction grant requirements. The bidders were invited to include a specific line item cost for any project increases due to Federal requirements. Of seven bids received, the line item bid entries for cost increases attributable to Federal requirements varied from no increase to a three percent hike. The average was less than one percent. The actual low bid selected by the applicant showed a cost increase of one-quarter of one percent for compliance with Federal requirements.

The Housing and Urban Development (HUD) Regional Office recently recommended to its headquarters that HUD not award a grant for sewer construction in Blaine, Minnesota. The action was taken after the FWPCA Regional Office certified the project on a conditional basis because of lack of agreement with Minneapolis-St. Paul on meeting enforcement conference recommendations. Wastes from the proposed Blaine project would be sent to the Twin-Cities' sewage treatment plant. Vice President Humphrey's office recently made an inquiry about the project.

The first grant application of \$4.7 million by the city of Detroit to provide sewage treatment facilities to meet Federal enforcement conference recommendations has been received and is being reviewed by the Regional Construction Grants Office. The application is a part of a proposed \$110 million construction program.

The city of Westlake, a Cleveland suburb--and the largest city in Ohio without a sewer system--has decided to abandon plans for a county financed sewer system because of legal stumbling blocks it has encountered. The city now intends to place a bond issue before the voters this spring to obtain the necessary financing.

7. Pollution Surveillance

Fourteen of the 17 current-metering stations set in Lake Superior to determine water current movements have been recovered. Twelve were taken aboard by the Telson Queen and two by the Coast Guard Cutter Woodrush. The Woodrush intends to retrieve more stations in the near future, the Rochester Program Office reports. One station near Michipicoten Island lost its anemometer buoy, and bad weather has delayed a search for it. Arrangements have been made with the University of Toronto to have the ship, Porte Dauphine, attempt to recover the buoy later in the month.

8. Research and Development

Officials of the National Water Quality Laboratory at Duluth, Minnesota, have selected a stream site near Cincinnati, Ohio, for experiments. According to Dr. Donald I. Mount, lab director: "The objective is to test the applicability of laboratory-derived results to a natural stream. After one year of study, a toxic material will be added at a concentration at which we think we can predict the damage to be expected (to the aquatic environment)."

Dr. Mount and his assistant also met with directors of Potlatch Forests, Inc., and its subsidiary, Northwest Paper Company, located in Cloquet, Minnesota, and agreed to gather samples for a joint research project, investigating such paper and pulp wastes as pine kraft, aspen kraft and aspen sulphite.

The Rochester Program Office director attended a meeting in Albany, New York, to discuss studies progressing on Oneida Lake, which is plagued by excessive growths of algae caused by pollution. The United States Geological Survey is performing a geochemical study to identify the environmental relationships involved in eutrophication, the premature aging process of lakes. This five-year, \$140,000 study is financed by the Geological Survey and the New York Conservation Department on a 50-50 basis. Townsend reports that FWPCA recommendations for taking certain remedial steps now are being resisted by Geological Survey officials. The Rochester Program Office has prepared a restoration plan for Oneida Lake, which urges certain measures now to arrest the lake's algal production.

In addition, the Rochester Program Office has completed a second status report on phosphate removal at six primary and 17 secondary sewage treatment plants in the Lake Ontario area. Phosphorous is a

nutrient that spurs algal growth. Plants with primary treatment are averaging less than 15 per cent phosphorous removal; trickling filter plants about 25 per cent; and activated sludge plant 50 per cent; and extended aeration plants 10 per cent. No significant reduction in soluble phosphorous has been found, the report states.

9. Administrative Services

Personnel activity has been minimal because of the hiring "freeze."

<u>Personnel Staffing</u>	<u>September 30, 1967</u>	<u>October 31, 1967</u>	<u>November 30, 1967</u>
A. Total Positions	212	212	212
B. Total Personnel on Board	202	209	208
C. Total Personnel Gains	7	10	1
1. New Hires	4	2	0
2. Transfers	3	8	1
D. Total Personnel Losses	3	3	2
1. Resignations	3	2	2
2. Transfers	0	1	0

###