October 4, 2017

Milwaukee Metropolitan Sewerage District
c/o Mr. Tom Chapman, P.E.
260 West Seeboth Street
Milwaukee, WI 53204

Subject: Estabrook Dam Abandonment and Removal, Permit and Plan Approval Key Sequence # 857, Field File # 40.08, Milwaukee County

Dear Mr. Chapman:

I have reviewed Milwaukee Metropolitan Sewerage District's application to abandon and remove the Estabrook Dam on the Milwaukee River, located in the Cities of Milwaukee and Glendale, Milwaukee County. You will be pleased to know that your application is hereby conditionally approved.

Attached is a copy of your permit and plan approval, which lists the conditions that must be followed. A copy of the document must be posted for reference at the project site. Please read the conditions carefully so that you are fully aware of what is expected of you. Your enclosed state water quality certification confirms the state certification necessary for proceeding under an approval pursuant to a federal permit issued by the Army Corps of Engineers.

The following must be submitted to this office for review and approval no later than five working days prior to the beginning of work:

- Final water management plans, including dewatering
- Final cofferdam plans and specifications
- Final excavation plans, including disposal, for sand cover behind fixed crest spillway
- Final erosion control plan including equipment access and construction sequence

Please note that State Statute requires you to submit a verified statement indicating that the dam was removed in accordance with the plans and specification approved by the Department, as well as photographs depicting the construction progress and its completion. These items will need to be submitted within ten days after construction has finished.

Please notify Tanya Lourigan at least five days prior to beginning the project and again when the project has been completed. If you have any questions about your permit and plan approval, please call at (608) 266-8033 or email me at William.Sturtevant@wisconsin.gov.

Sincerely,

[Signature]

William Sturtevant, P.E.
State Dam Safety Engineer
Wisconsin Department of Natural Resources

cc: Kevin Shafer, P.E., Executive Director, MMSD (email)
    April Marcangeli, U.S. Army Corps of Engineers (email)
    Michael Scott, Attorney – Department of Natural Resources (email)
    Rick Reed, Conservation Warden Supervisor – Department of Natural Resources (email)
    Tanya Lourigan, P.E., Water Management Engineer – Department of Natural Resources (email)
FINDINGS OF FACT

1. Tom Chapman, P.E. on behalf of the Milwaukee Metropolitan Sewerage District (MMSD) filed an application on May 1, 2017 to abandon and remove the Estabrook Dam on the Milwaukee River, located in the northeast quarter of Section 5, Township 7 North, Range 22 East in the Cities of Milwaukee and Glendale, Milwaukee County.

2. The final plans, specifications, and the design report were completed by AECOM under the professional seal of Jaren Hiller, P.E. and are dated September 8, 2017.

3. The project will consist of abandonment of the permit for the Estabrook Dam and will include removal of the structure including the fixed crest spillway, gated structure and icebreakers; removal of the residual sediment and six-inch thick sand cover adjacent to the upstream face of the fixed crest spillway; and restoration of adjacent river banks with bioengineered stabilization methods or armoring, as appropriate.

4. The Department of Natural Resources (Department) has completed an investigation of the project site and has evaluated the project as described in the application and plans.

5. An Administrative Order was issued to Milwaukee County on July 28, 2009 requiring the County (owner at the time of the Order) to either repair/reconstruct or abandon and remove the Estabrook Dam.

6. On December 16, 2016, Milwaukee County applied to transfer ownership of the Estabrook Dam to the Milwaukee Metropolitan Sewerage District.

7. On January 19, 2017, the transfer of the dam from Milwaukee County to MMSD was approved by the Department.

8. The Department held a Public Informational Meeting regarding the abandonment and removal of the dam on September 13, 2017. The meeting was attended by approximately 75 people.

9. MMSD has complied with the requirements set forth by Wisconsin Statutes and Administrative Codes necessary to complete the application to abandon and remove the Estabrook Dam.

10. The proposed project, if constructed in accordance with this permit, will not adversely affect water quality, will not increase water pollution in surface waters and will not cause environmental pollution as defined in Section 283.01(6m), Wisconsin Statutes.

11. The Milwaukee River is navigable at the location of the dam. The proposed project will not adversely affect public rights in navigable water and will not endanger life, health, and property upon compliance with the conditions in the Order.

12. The proposed project will not result in significant adverse impacts to wetland functional values, significant impacts to water quality, or other significant adverse environmental consequences.
CONCLUSIONS OF LAW

1. The Department has the authority under Chapter 31, Wisconsin Statutes and the foregoing Findings of Fact, to issue the permit requested, subject to the listed permit conditions.

2. The Department has complied with the requirements of Chapter NR 150, Wisconsin Administrative Code and Section 1.11, Wisconsin Statutes. The Department has also complied with the requirements of Wis. Admin. Code, Section NR 1.95 and Chapter NR 299.

PERMIT AND PLAN APPROVAL

Tom Chapman, P.E. on behalf of the Milwaukee Metropolitan Sewerage District (MMSD), is hereby granted under Section 31.185, 31.18, Wisconsin Statutes, a permit and plan approval to abandon and remove the Estabrook Dam on the Milwaukee River, located in the northeast quarter of Section 5, Township 7 North, Range 22 East in the Cities of Milwaukee and Glendale, Milwaukee County. The final plans, specifications, and the design report were completed by AECOM under the professional seal of Jaren Hiller, P.E. and are dated September 8, 2017. Permit and plan approval granted and order issued subject to the conditions in the order.

Construction of a cofferdam is also authorized under this permit. A copy of this plan approval shall constitute the certificate evidencing a grant of the permit as provided in s. 31.11, Wis. Stats.

ORDER

IT IS THEREFORE ORDERED:

1. The selected contractor will need to submit the final water management plan including any dewatering to the Department for review and approval at least five days prior to construction. The selected contractor will also need to submit the final erosion control plan including equipment access and construction sequence to the Department for review and approval no later than five working days prior to beginning work.

2. The selected contractor must submit final cofferdam plans and specifications to the Department for review and approval no later than five working days prior to beginning work. The cofferdam design must be prepared and submitted by a professional engineer registered in Wisconsin.

3. The selected contractor must submit final plans and specifications for excavation behind the fixed crest spillway, including the material disposal plan, to the Department for review and approval no later than 15 working days prior to beginning work. The sediment management must be conducted in accordance with any plans, agreements and codes for the levels of contamination determined in the sediment analysis.

4. The impoundment must remain drawn down for the duration of the project. Minimum low flow in compliance with section 31.34, Wis. Stats. must be passed at all times for the duration of the project.
5. You must not deposit or store any of the removed materials in any wetland or below the ordinary high water mark of the river. All removed or stored materials must be placed out of the floodway of any stream. Stockpiling of material is not allowed within the floodway or below the ordinary high water mark. Load-out piles, the temporary placement of material intended for loading during a continuous work period, is allowed within the confines of the active work zone but must be removed from the active work zone prior to the stoppage of work, e.g., end of the work day.

6. All materials removed from the bed of the Milwaukee River shall be transported in water tight equipment to a Department approved landfill site. No removal activity may begin until the facility is prepared to accept the dredge spoils.

7. Care must be taken to minimize spillage from backhoe buckets to the disposal trucks. All trucks leaving the site must be covered to prevent contaminants from spilling from trucks on the designated route to the disposal facilities.

8. You must maintain a log of the disposal of contaminated materials, truck hauling materials, and the amount of contaminated materials disposed of in each truck. This must be made available to the Department personnel upon request and must remain on the project site at all times work is being performed.

9. All soil, sediment, stone, other solid material, and water utilized, or collected during excavation, construction, or decontamination activities, must be disposed of in accordance with the NR 500 series or any other applicable state or federal regulations. This includes the gravel and material from the temporary road access.

10. You must notify Tanya Lourigan at (608) 275-3287 five days before starting construction and again not more than five days after the project is complete.

11. You must complete the project as described on or before October 4, 2020. If you will not complete the project by this date, you must submit a written request for an extension prior to the expiration date of the permit. Your request must identify the requested extension date and the reason for the extension. A permit extension may be granted, for good cause, by the Department. You may not begin or continue construction after the original permit expiration date unless the Department grants a new permit or permit extension in writing.

12. This permit does not authorize any work other than what you specifically describe in your application and plans dated September 8, 2017, prepared by AECOM, under the professional seal of Jaren Hiller, P.E., and as modified by the conditions of this permit. If you wish to alter the project or permit conditions, you must first obtain written approval of the Department.

13. You are responsible for obtaining any permit or approval that may be required for your project by local zoning ordinances and by the U.S. Army Corps of Engineers before starting your project, including but not limited to required construction access easements as well as any state and federal cultural, historical or archaeology requirements.

14. Development connected with this project shall conform to local zoning ordinances and the standards for floodplain and shoreland development contained in Chapters NR 115 and NR 116, Wisconsin Administrative Code.
15. Upon reasonable notice, you shall allow access to your project site during reasonable hours to any Department employee who is investigating the project's construction, operation, maintenance or permit compliance.

16. The Department may modify or revoke this permit if the project is not completed according to the terms of the permit, or if the Department determines the activity is detrimental to the public interest.

17. You must post a copy of this permit at a conspicuous location on the project site, visible from the waterway, for at least five days prior to construction, and remaining at least five days after construction. You must also have a copy of the permit and approved plan available at the project site at all times until the project is complete.

18. You must supply a copy of this permit to every contractor associated with this project.

19. Your acceptance of this permit and efforts to begin work on this project signify that you have read, understood and agreed to follow all conditions of this permit and order.

20. You must submit a series of photographs to the Department, within 10 days of completion of work on the site. The photographs must be taken from different vantage points and depict all work authorized by this permit.

21. Section 31.12(4), Wis. Stats., requires a verified statement to be filed with the Department within 10 days after completion of dam removal, stating that it was removed in accordance with the plans and specifications approved by the Department.

22. On-site inspection by a professional engineer registered in Wisconsin shall be performed periodically and during the critical stages of construction. Critical stages are considered anytime that work performed will be covered and cannot be inspected at a later time. Weekly inspection reports including photographs or video shall be submitted by the inspecting registered engineer.

23. Two hard copies and an electronic copy of signed and sealed record drawings and specifications shall be submitted to the Department within 30 business days after the completion of work on the site.

24. Site restoration work such as watercourse planting and seeding shall be completed between March 1st and June 15th, or between October 1st and November 30th.

25. Upon commencing spillway demolition work as shown on the plans, the contractor may not leave a partially demolished structure unattended in the Milwaukee River for a period longer than 2 weeks.

26. You are required to provide signage on the banks of the Milwaukee River in Estabrook Park at the canoe landing as well as upstream on or in the vicinity of the N. Port Washington Road bridge to warn boaters of the construction occurring downstream at the dam.

27. The Department shall retain jurisdiction during construction for the purpose of monitoring water quality and shall cause the applicant to install such devices or make such modifications to the dam and flowage as may be reasonably necessary to protect water quality in the Milwaukee River and prevent violation of the water quality standards enumerated in Wis. Admin. Code, Chapter NR 102. If water quality standards are violated during construction and no feasible method is available to prevent such violation from continuing, the Department shall initiate proceedings for the revocation of the plan approval herein issued.
28. The sponsor shall implement and maintain proper soil erosion and sediment control best management (BMPs) practices during construction of the project. Erosion and sediment control BMPs shall be accomplished using the guidelines in the Department construction site erosion and sediment control technical standards available via the internet at http://dnr.wi.gov/topic/stormwater/. BMPs shall be properly installed, inspected, and maintained to function as intended until the project site is stabilized. All temporary erosion and sediment control practices (e.g. silt fence, etc.) shall be removed once the construction site has undergone final stabilization.

29. Construction sites disturbing one or more acres of land require coverage under a Department construction site storm water discharge permit prior to commencing any land disturbing construction activity. Construction sites disturbing less than one acre but more than 10,000 square feet on the bank of a navigable waterway require coverage under a Department chapter 30, Wis. Stats. grading permit. Both of these permits require site specific erosion and sediment control plans prepared by the sponsor.

30. Appropriate erosion and sediment control measures must be in-place prior to clearing the site and effective during every phase of this project. Erosion and sediment control measures must be in place at the end of each working day. Erosion and sediment control measures must be inspected within 24 hours after every rainfall exceeding one-half inch and at least once per week. Necessary repairs or replacement of erosion and sediment control measures must be made within 24 hours after inspection.

31. You must maintain a written report of the erosion control inspections, including a description of maintenance performed. The reports must be made available to Department personal upon request and must remain on the project site while work is being performed.

32. Stabilization of disturbed soils in the non-growing season (e.g., between October 1st and April 15th) require the use of temporary measures including erosion matting, or land applied erosion control additives.

33. When a uniform perennial vegetative cover has been established with a density of at least 70 percent or prior to at the direction of the Department, all temporary erosion and sediment control measures must be removed and disposed of properly. Any remaining temporary erosion control devices after this point constitute littering and may be enforced as determined necessary by the Department.

34. All equipment used for the project including but not limited to tracked vehicles, barges, boats, silt or turbidity curtain, hoses, sheet pile and pumps shall be de-contaminated for invasive and exotic viruses and species prior to use and after use. The following steps should be taken every time you move your equipment to avoid transporting invasive and exotic viruses and species. To the extent practicable, equipment and gear used on infested waters should not be used on other non-infested waters.
   - Inspect and remove aquatic plants, animals, and mud from your equipment.
   - Drain all water from your equipment that comes in contact with infested waters, including but not limited to tracked vehicles, barges, boats, silt or turbidity curtain, hoses, sheet pile and pumps.
   - Dispose of aquatic plants, animals in the trash. Never release or transfer aquatic plants, animals or water from one water body to another.
   - Wash your equipment with hot (>104°F) and/or high pressure water OR allow your equipment to Dry thoroughly for 5 days.

35. You, your agent, and any involved contractors or consultants may be considered a party to the violation pursuant to Section 31.99, Wisconsin Statutes, for any violations of Chapter 31, Wisconsin Statutes or this permit.
NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with section NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with section NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing does not extend the 30-day period for filing a petition for judicial review.

Dated at Madison, Wisconsin on OCTOBER 4, 2017

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By William D. Sturtevant, P.E.
State Dam Safety Engineer