State of Wisconsin
Department of Natural Resources
Bureau of Watershed Management
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Watershed Adaptive Management Request

Notice: Pursuant to s. NR 217.18, Wis. Adm. Code, this form must be completed and submitted to the Department at the time of the reissuance of an existing WPDES (Wisconsin pollutant discharge elimination system) permit to request adaptive management for phosphorus water quality based effluent limits (WQBEL).Failure to provide all requested information may result in denial of your request. Personal information collected will be used for administrative purposes and may be provided to requestors to the extent required by Wisconsin Open Records law [ss. 19.31-19.39, Wis. Stats.].

Type of Request:

☒ This is the formal adaptive management request as required in s. NR 217.18(2)

☐ This is a preliminary adaptive management request (to be submitted as part of facility planning.)

Facility and Permit Information

Facility Name			WPDES Permit No.
Green Bay Metropolitan Sewerage District			WI - 0065251-02-0
Facility Address	**City**	**State**	**ZIP Code**
2231 N. Quincy St.	Green Bay	WI	54302

Receiving Water: Fox River

Owner Contact Information

Last Name	First Name	MI	Phone No. (incl. area code)
Sigmund	Thomas		920-432-4893
Street Address			**FAX Number**
2231 N. Quincy St.			920-432-4302

City	State	ZIP Code	Email address
Green Bay	WI	54302	TSigmund@newwater.us

Facility Information

Provide listed information for each lagoon or pond basin

Required for AM Request	Wis. Administrative Code Reference	Conclusion	Evidence/Source of information (attach as needed)
1. NPS contribute at least 50% of total P contribution	s. NR 217.18(2)(b)	☒ NPS contributes at least 50% ☐ NPS DOES NOT contribute at least 50%	Fox River TMDL and PRESTO. See Section 1.1 of AM Plan
2. WQBEL Requires Filtration	s. NR 217.18(2)(c)	☒ Filtration required ☐ Filtration NOT required	See Section 1.1 of AM Plan
3. AM Plan	s. NR 217.18(2)(d)	☒ Plan is Included – Page 3 ☐ Plan is NOT Included *For a preliminary adaptive management request, AM plan not required*	

Facility Operation and Performance

1. **Current P removal capability** – If the facility is currently required by a WPDES permit to monitor effluent phosphorus (P) provide a summary of the influent and effluent annual average P concentrations for each of the past three (3) years. If permit required P data is not available, the applicant should provide any other P data that may be applicable and available. If no data is available, the Department may estimate the P effluent concentration by based on data from other similar facilities.

   The Green Bay Facility (GBF) average influent and effluent phosphorus concentrations are:
   2016: 3.7 mg/L ; 0.34 mg/L
   2017: 3.7 mg/L ; 0.28 mg/L
   2018 (through September): 3.5 mg/L ; 0.27 mg/L

   The De Pere Facility (DPF) average influent and effluent phosphorus concentrations are:
   2016: 3.8 mg/L ; 0.14 mg/L
   2017: 4.4 mg/L ; 0.15 mg/L
   2018 (through September): 5.0 mg/L ; 0.25 mg/L

2. **Facility Operation** – Provide a summary description of overall facility operation. If not a continuously discharging facility, describe storage procedures and the time periods when effluent discharge occurs.

See the attached GBMSD Facility Description.

3. **Previous Studies** – Reference or attach any facility planning or evaluation study that evaluated facility performance capabilities (Note – Only include studies that are recent, within 5 years, or otherwise applicable for the evaluation of the existing facility and current conditions).

NEW Water has completed an Operational Evaluation Report (OER) and three OER updates, all of which have been submitted to the WDNR. The original OER was completed in June 2015, OER Status Report 1 in June 2016, Status Report 2 in June 2017, Status Report 3 in December 2017 and Status Report 4 in June 2018. NEW Water has submitted to WDNR a phosphorus Preliminary Compliance Alternatives Plan in March 2018 and and the Final plan in December 2018 that summarizes facility evaluations for phosphorus compliance. An Engineering Report for DPF tertiary treatment alternatives is included in the Final Compliance Alternatives Plan.

Adaptive Management Plan (s. NR 217.18(d))

This section should summarize the Adaptive Management Plan for internal and external review. A complete Adaptive Management Plan should be attached. Note: If this is a preliminary adaptive management request, this section is not required.

Watershed	Percent Contribution of Applicant Discharge
Ashwaubenon Creek and Dutchman Creek TMDL Sub-basins	0% within Ashwaubenon and Dutchman Creeks watersheds. 2.5-3% within Fox River watershed.

Action Area (include map)

See attached map.

Watershed Characteristics and Timeline Justification

Ashwaubenon and Dutchman Creeks are predominantly agricultural land use (~56%) which require more than 88% reduction of phosphorus from TMDL baseline loading conditions. Developed areas account for about 30% of the land use. Time is needed to work with these significant land uses to achieve phosphorus and sediment reductions. See Section 2 of the AM Plan.

Key Proposed Actions

Stakeholder and partner team chartering, execute partnership agreements, develop GIS-based tools for conservation planning, desktop evaluation of conservation opportunities, field walks to plan conservation opportunities, land owner and grower meetings to plan BMP implementation, verify and maintain BMPs, water quality and biological monitoring, refine cost-share strategy, develop a Farm Performance Standard. See Section 3.2 of the AM Plan.

Key Goals and Measures for Determining Effectiveness

The AM Program has established near-, mid-, and long-term goals for measuring progress. Near-term goals focus on actions that must occur both before and following the official start of the Program. They include partnership coordination and building, implementing early BMPs that leverage relationships and processes developed in the Silver Creek Pilot Project, refining tools required for field walks, developing conservation plans, and supporting broad implementation of agricultural, municipal, and other BMPs. Mid-term goals will include conservation planning on all fields, implementing BMPs across the Action Area, and evaluating water quality and biological monitoring data to adaptively manage the Program. The long-term goals are focused on maintaining partnerships and demonstrating improvements in water quality for future WPDES renewals, and making long-term behavioral changes that will produce sustainable improvements beyond Adaptive Management. See Section 3.3 of the AM Plan.

Partner(s)

Partners include those also heavily involved in the Silver Creek Pilot Project and include land owners and growers, Outagamie and Brown Counties, NRCS, UW-Green Bay, Oneida Nation, NGOs such as the Nature Conservancy and Ducks Unlimited, US Fish and Wildlife, and engineering and agronomic consultants. Upon approval of the AM Plan, formal partnership agreements are planned and anticipated to include municpal stakeholders.

Funding Sources

NEW Water will fund the AM Plan through customer billing. Grants and alternative funding sources will be pursued during the AM period.

Adaptive Management Request and Certification

Based on the information provided, I am requesting the Watershed Adaptive Management option to achieve compliance with phosphorus water quality standards in accordance with s. NR 217.19, Wis. Adm. Code.
I certify that the information provided with this request is true, accurate and complete to the best of my knowledge.

Print or type name of person submitting request*	Title
Thomas Sigmund	Executive Director
Signature of Official: Thomas W Sigmund	Date Signed: 12-19-2018

*Must be an Authorized Representative for the treatment facility