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

Form 3200-139 (1/12)

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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 1

requestors to the extent required by wisconsin Open Nectorus law [55, 19,51-19,59, 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.)												
This is a proliminary dauptive management request to be submitted as part of facility planning.)												
Facility and Permit Infor	mation											
Facility Name		WPDES Permit No.										
City of Beaver Dam Wastewater Treatment Plant WI - 0023345-09-1												
Facility Address				City					State	ZIP Code		
108 Myrtle Road					Beaver Dam				WI	53916		
Receiving Water												
Beaver Dam River												
Owner Contact Informat	ion											
Last Name	First Name					MI		Phone No. (incl. area code)				
Minnema Rob							(920	20) 887-4625				
Street Address				•				FAX Number				
108 Myrtle Road							(920) 887-4627					
City				е	ZIP Code	Email address						
Beaver Dam WI			WI		53916 rminnem			a@cityofbeaverdam.com				
Facility Information												
Provide listed information for ea	ch lagoon o	r pond b	pasin									
Required for AM Request Wis. Administrative			Conclusion			Evidence/Source of						
	Code Reference					information (attach as needed)						
1. NPS contribute at least 50% of total P contribution	s. NR 217.18(2)(b)			X	NPS contributes at			2019 Final Compliance				
50% of total P contribution					NPS DOES NOT co			Alternatives Plan				
					least 50%			1 1100				
2. WQBEL Requires Filtration s. NR 217.18(2)(c))	X	Filtration required			2019 Final Compliance					
					Filtration NOT requi	ired		Alternatives Plan				
3. AM Plan	AM Plan s. NR 217.18(2)(d))	X	Plan is Included – Page 3			2019 Final Compliance				
					Plan is NOT Include	ed	Alternatives Plan			•		
					For a preliminary ad	daptive		Anc	manves	1 Iaii		
					management request, AM							
F :::4 0 4:			_		plan not required							
Facility Operation and P	errorman	ce										

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.

Average effluent phosphorus concentration: 0.8 mg/L. For details, see 2019 Final Compliance Alternatives Plan.

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 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.

Ferric chloride addition for chemical phosphorus removal, no tertiary filtration. For details, see 2019 Final Compliance Alternatives Plan.

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).

See 2019 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.

section is not required.							
Watershed	Percent Contribution of Applicant Discharge						
Beaver Dam Watershed	16% (PRESTO Report)						

Action Area (include map)

Beaver Dam Watershed: Rock River TMDL Reaches 34, 33, 82, 32. Map is included in 2019 Final Compliance Alternatives Plan.

Watershed Characteristics and Timeline Justification The Beaver Dam Watershed includes the City of Beaver Dam, the Village of Fox Lake, and the Village of Randolph. The watershed is dominated by agriculture, especially corn production, with several large lakes (Beaver Dam Lake, Fox Lake). To meet the water quality criterion, significant reductions are required, lasting for at least two to three permit terms.

 $\begin{tabular}{ll} Key Proposed Actions & 1. Wastewater Treatment Plant Improvements: reduce effluent phosphorus from 0.8 mg/L to 0.4 mg/L. \\ \end{tabular}$

- 2. Agricultural and Land Practices: Cover crops, reduced tillage, etc.
- 3. Lake and Shoreline Improvements: carp management, shoreline protection, etc.

Key Goals and Measures for Determining Effectiveness

- 1. Reduce annual phosphorus loadings by approximately 7,400 pounds by end of second permit term.
- 2. Monitor phosphorus at end of Reach 34 (Beaver Dam River at CTH S in Leipsig), with goal of meeting water quality criterion of 0.075 mg/L.
- 3. Utilize resources effectively, with goal of Adaptive Management remaining the most cost effective compliance option.

Partner(s)

City of Beaver Dam, Beaver Dam Lake Improvement Association, Applied Technologies, Inc., Dodge County Farmers For Healthy Soil Healthy Water, County Land and Water Conservation Departments, MSA Professional Services, USDA, WDNR, etc. See 2019 Final Compliance Alternatives Plan.

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Funding Sources

No program-wide funding has been identified. USDA partnership to cost-share on practices.

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				
Rob Minnema	Director of Utilities				
Signature of Official Rob Minnema	Date Signed				
rvuu iviiiilitiila	April 30, 2019				

^{*}Must be an Authorized Representative for the treatment facility