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 requesters 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

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>WPDES Permit No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Beaver Dam Wastewater Treatment Plant</td>
<td>WI - 0023345-09-1</td>
</tr>
</tbody>
</table>

Facility Address: 108 Myrtle Road, Beaver Dam, WI 53916
Receiving Water: Beaver Dam River

Owner Contact Information

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Phone No. (incl. area code)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnema</td>
<td>Rob</td>
<td></td>
<td>(920) 887-4625</td>
</tr>
</tbody>
</table>

Street Address: 108 Myrtle Road, Beaver Dam, WI 53916
Email Address: rminnema@cityofbeaverdam.com

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% | 2019 Final Compliance Alternatives Plan |
2. WQBEL Requires Filtration | s. NR 217.18(2)(c) | Filtration required | 2019 Final Compliance Alternatives Plan |
3. AM Plan | s. NR 217.18(2)(d) | Plan is Included – Page 3 | 2019 Final Compliance Alternatives Plan |

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.

Average effluent phosphorus concentration: 0.8 mg/L. For details, see 2019 Final Compliance Alternatives Plan.
Ferric chloride addition for chemical phosphorus removal, no tertiary filtration. For details, see 2019 Final Compliance Alternatives Plan.

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).

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.

<table>
<thead>
<tr>
<th>Watershed</th>
<th>Percent Contribution of Applicant Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaver Dam Watershed</td>
<td>16% (PRESTO Report)</td>
</tr>
</tbody>
</table>

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.

Key Proposed Actions

1. Wastewater Treatment Plant Improvements: reduce effluent phosphorus from 0.8 mg/L to 0.4 mg/L.
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.
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.

<table>
<thead>
<tr>
<th>Print or type name of person submitting request*</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rob Minnema</td>
<td>Director of Utilities</td>
</tr>
</tbody>
</table>

*Must be an Authorized Representative for the treatment facility*