

The attached guidance, “Approval of Designs for Blending Requests for Existing Facilities”, was developed for use by Department staff and WPDES permit holders when evaluating whether blending can be included in municipal WPDES discharge permits. Blending is the practice of diverting a portion of untreated or partially treated wastewater around a biological treatment process within a wastewater treatment facility.

Blending may be approved if:

1. Blending is necessary during wet weather conditions to avoid severe property damage to the sewage treatment facility.
2. The permittee is effectively implementing a CMOM (Capacity Management, Operations & Maintenance) program.
3. The permittee demonstrates that there are no feasible alternatives to the use of blending.
4. The design of the sewage treatment facility is approved by the department to operate with blending.

This is new guidance. This document supplements “SSO Rule Implementation Guidance,” September 2013, 3400-2013-05. This guidance provides a procedure to address blending when a facility has the capability to blend but the design of the facility has not been specifically approved to operate with blending.

We are now soliciting comments from the public on this guidance. Once the 21-day notice period is complete, all comments will be considered, revisions will be made to the guidance documents as needed, and final guidance will be made available to internal and external stakeholders. Comments related to this draft guidance document should be sent to Gerald Novotny, Gerry.Novotny@wisconsin.gov; 608-267-7625.



BUREAU OF WATER QUALITY
PROGRAM GUIDANCE
WASTEWATER PROGRAM

DRAFT

Guidance for Approval of Design for Blending Requests for Existing Facilities
June 13, 2014

This document is intended solely as guidance, and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations, and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

APPROVED:

Susan Sylvester, Director
Bureau of Water Quality

Date

Guidance for Approval of Design for Blending Requests for Existing Facilities

A number of municipalities are requesting that blending be added to their WPDES permits.

S. NR 210.12 (2), Wis. Adm. Code, states that the Department may approve blending when all of the following conditions are met:

- (a) Blending may be necessary during wet weather and other high flow conditions to avoid severe property damage to the sewage treatment facility.
- (b) The permittee is effectively implementing a CMOM program.
- (c) The permittee demonstrates that there are no feasible alternatives to the use of blending (feasibility can include considerations of cost).
- (d) The design of the sewage treatment facility is approved by the department to operate with blending.

If there has not been a recent facilities plan or plan and specification approval that specifically recognizes blending as provided in NR 210.12, the permittee should submit a report that addresses the design requirements for blending in NR 210.

Other than a definition of blending, NR 110 provides no specific design criteria for blending but ss. NR 110.06, NR 110.07 and NR 110.09 do require that detailed design information be provided for reviewable projects. It is expected that the information required to document the need for blending will be readily available to the permittee.

The report should demonstrate that the sewage treatment facility has in place the requisite capability and equipment to implement blending. If not included with WPDES permit application, the report should also demonstrate: 1) the need for blending to avoid severe damage to the treatment plant, and 2) that there are no feasible alternatives to blending.

With respect to facility design, the report should include:

1. A summary of the treatment units and hydraulic capacities of each unit. A description of the configuration and capacities of any channels, conduits, or pumps that allow for blending. A description of the methods used to monitor and record the time, duration and volume of the flow diverted around the biological treatment units. (The actual operating capacities of the various units may be different from the original design values or assumed capacities provided by the design criteria in NR 110. The report should explain how the capacity of the various units was determined.)
2. A table of the design flows for the treatment plant including the peak design flows and a description of the conditions under which blending would be initiated.
3. A summary of recent flows monitored at the treatment plant. Any blending events should be described including the precipitation that triggered the event.

4. Documentation or calculations that demonstrate that effluent limits were or would be met during a blending event.
5. If not included elsewhere, an explanation as to why the permittee has concluded that there are no feasible alternatives to blending.

Documentation that the permittee is effectively implementing a CMOM program or has a program to reduce infiltration and inflow to the sewage collection system should be submitted with the permit application and evaluated as part of the permit issuance process. Note that s. NR 208.05(3) (m) 2. requires that owners record and maintain information on the operation and maintenance of sewage collections systems. Therefore information on the collection system should be available even though implementation of CMOM is not required by s. NR 210.23(2) until August 1, 2016.

Information on CMOM activities may be included in the blending report however approval of the report does not constitute approval of a CMOM program.

The reports will be reviewed and approved similar to treatment plant re-rating requests. The owner may hire a consulting engineer to prepare the report but it is not necessary to have the report submitted by a registered professional engineer.

A transmittal letter, one paper copy of the report, and a CD with a PDF file of the report should be submitted to:

Barton T. Chapman, P.E., Chief
Wisconsin Department of Natural Resources
Bureau of Water Quality
P.O. Box 7921
Madison, WI 53707-7921

The Plan Review Engineer will forward a copy of the report to the Basin Engineer. A copy will be provided to the Permit Drafter if a permit application has been received. The Plan Review Engineer and the Basin Engineer will review the report. If the report provides an adequate basis for concluding that the provisions of s. NR 210.12 (2) will be met, the Plan Review Engineer will prepare an approval letter (a sample letter is attached.) The report and any review documents will be filed in the plan review database.

It is important to note that approval of the report does not constitute approval to blend. Blending is prohibited unless it is also included as a condition in a permit and, thereby, subject to the appropriate reviews and approvals provided under the permit issuance process.

References: Chapter NR 210, Wis. Admin. Code
SSO Rule Implementation Guidance, September 2013 3400-2013-05

Attachment: Sample Approval Letter