

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

PUBLIC NOTICE OF INTENT TO REISSUE A WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM (WPDES) PERMIT No.WI-0060003-11-0

Permittee: Village of Birchwood, PO Box 6, Birchwood, WI, 54817

Facility Where Discharge Occurs: Village of Birchwood, 414 Edenharter Road, Birchwood, Wisconsin

Receiving Water And Location: The Groundwater within the Red Cedar Lake Watershed in the Lower Chippewa River Drainage Basin in Washburn County

Brief Facility Description and Summary of Proposed Changes: The Village of Birchwood wastewater treatment facility has a annual average design flow of 85,000 gallons per day with actual flows averaging 29,000 gallons per day over the past five years (June 2019 – June 2023 data). Treatment consists of a head works building followed by an aerated lagoon. In the lagoon naturally occurring bacteria and enzymes already in the wastewater metabolize organic matter in the waste stream. The lagoon has floating vertical baffle curtains (used to increase the retention time and direct the wastewater flow), floating aerator units (add oxygen to the wastewater), and an insulated cover (helps retain heat in the system during cold periods). After aeration wastewater flows to a moving bed biofilm reactor unit (MBBR). Wastewater is treated in three tanks, in series, containing thousands of biofilm carriers. The biofilm carriers are small polyethylene disks that are kept in motion with aerators or mixing fans. Microorganisms including bacteria and enzymes found in the wastewater attach and grow on the surface of the discs, where they metabolize additional organic material in the water. Wastewater from the final tank can be sent back to the first tank to help repopulate microorganism numbers if needed. The solids and organic matter that slough off the disks are further treated and allowed to settle in the aerated lagoon. A second lagoon, used for settling, also contains a baffle curtain and insulated surface cover. Effluent is discharged to three seepage cells. Biofilm living on the sandy soil in the bottom of the seepage cells continue to metabolize organic matter and nutrients as the effluent percolates through the soil eventually reaching groundwater. There are seven monitoring wells located around the seepage cells to assess any groundwater impacts of the discharge.

It is the Department's intention to renew the permit for another term. The proposed new permit expiration date will be June 30, 2029. Limitations and conditions which the Department believes adequately protect the receiving water are included in the proposed permit. Changes from the previous permit include:[1] An effluent total nitrogen limit of 15 mg/l has been added. [2] The groundwater Preventative Action Limit for Nitrite+Nitrate was adjusted per NR 140 Wis. Adm. Code. [3] One sample of PFOA+PFOS in the sludge is required.

Permit Drafter's Name, Address, Phone and Email: Sheri A. Snowbank, DNR, 810 W Maple St, Spooner, WI, 54801, (715) 635-4131, Sheri.Snowbank@wisconsin.gov

Basin Engineer's Name, Address, Phone and Email: Arthur Ryzak, DNR, N4103 Highway 27, Ladysmith, WI 54848, (715) 403-2924, arthur.ryzak@wisconsin.gov

Persons wishing to comment on or object to the proposed permit action, or to request a public hearing, may write to the Department of Natural Resources at the above-named permit drafter's address. All comments or suggestions received no later than 30 days after the publication date of this public notice will be considered along with other information on file in making a final decision regarding the permit. Anyone providing comments in response to this public notice will receive a notification of the Department's final decision when the permit is issued. Where designated as a reviewable surface water discharge permit, the U.S. Environmental Protection Agency is allowed up to 90 days to submit comments or objections regarding this permit determination. If no comments are received on the proposed permit from anyone, including U.S. EPA, the permit will be issued as proposed.

The Department may schedule a public informational hearing if requested by any person and shall schedule a public informational hearing if a petition requesting a hearing is received from 5 or more persons or if response to this notice indicates significant public interest pursuant to s. 283.49, Wis. Stats. Requests for a public informational hearing shall state the following: the name and address of the person(s) requesting the hearing; the interest in the proposed permit of the person(s) requesting the hearing; the reasons for the request; and the issues proposed to be considered at the hearing.

Information on file for this permit action, including the draft permit, fact sheet and permit application, may be inspected and copied at either the above-named permit drafter's office or the above named basin engineer's office, Monday through Friday (except holidays), between 9:00 a.m. and 3:30 p.m. Please call the permit drafter or basin engineer for directions to their office location, if necessary. Information on this permit action may also be obtained by calling the permit drafter at (715) 635-4131 or by writing to the Department. Reasonable costs (15 cents per page for copies and 7 cents per page for scanning) will be charged for information in the file other than the public notice, permit and fact sheet. Permit information is also available on the internet at:

<http://dnr.wi.gov/topic/wastewater/PublicNotices.html>. Pursuant to the Americans with Disabilities Act, reasonable accommodation, including the provision of informational material in an alternative format, will be made to qualified individuals upon request.

NAME and ADDRESS OF PUBLISHING NEWSPAPER: Rice Lake Chronotype PO Box 30, Rice Lake, WI  
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Date Notice Issued: Wednesday, April 10, 2024