STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

PUBLIC NOTICE OF INTENT TO REISSUE A WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM (WPDES) PERMIT No.WI-0064718-03-0

Permittee: Richland Center Renewable Energy LLC, PO Box 19010, Green Bay, WI, 54307-9010

Facility Where Discharge Occurs: Richland Center Renewable Energy, 24520 Cty Hwy RC, Richland Center, WI 53581

Receiving Water And Location: Pine River

Brief Facility Description and Summary of Proposed Changes: Richland Center Renewable Energy (RCRE), an entity jointly owned by Schreiber Foods and Foremost Farms USA, is a food waste-to-energy facility located at 24520 County Hwy RC, Richland Center, Wisconsin. RCRE recovers energy from the treatment and digestion of dairy-related waste products to generate biogas, heat, and electricity. The RCRE facility consists of a wastewater treatment facility, sludge handling, storage and disposal equipment, and energy converting equipment. Process wastewater is generated at three area dairy processing facilities: Schreiber Foods East, Schreiber Foods West, and Foremost Farms. At each dairy processing facility, wastewater is separated into high strength wastewater (HSW) and normal strength wastewater (NSW) streams based on turbidity, temperature, pH, and oxidation reduction potential (ORP). These streams are then transported through a dedicated forcemain for each stream type by lift stations located at each factory. The NSW and HSW flows from each facility are sampled before entering the forcemain at each lift station. Flows combine in their respective forcemains 1.42 miles prior to arriving at Richland Center Renewable Energy (RCRE) for treatment and disposal. Combined samples from each forcemain are sampled at RCRE. HSW is pumped into the high strength silos at RCRE for equalization prior to being added to the anaerobic digesters, whereas NSW is pumped directly to the anoxic selector tank. Sanitary wastewater from the septic tanks and wastewater from floor drains within the plant are collected in a sump pit and are also sent to the anoxic selector. From the anoxic selector, wastewater flows into the aeration basins and then to the clarifier. Return activated sludge (RAS) drawn from the clarifier sludge blanket is piped back to the selector or aeration basin depending on selector anoxic ORP needs. The liquid effluent from the clarifier is piped to the dissolved air flotation (DAF) tank. Supernatant from the DAF is sent to the sand filtration system while the skimmed solids train returns to the high strength silos to stabilize/acclimate aerobic sludge for further treatment in the digester. Uncaptured underflow solids forming the DAF sludge blanket are returned to the anoxic selector. Effluent from the sand filtration system is monitored in-line before being discharged to the Pine River (Outfall 001). Sand filters are continually backwashed. All wash waters from the sand filters are sent to a reject pit before being pumped back to the selector. Silica and washed sand residuals are pumped out every month for disposal. RCRE facility process wastewater activities results in an average treated effluent discharge of 1.24 million gallons per day (MGD) to Outfall 001[2019-2023]. MLSS from the HSW anaerobic digesters is sent to the Ultrafiltration (UF) membrane system for dewatering. Supernatant from the UF membranes is returned to the NSW anoxic selector or can be diverted back to the digester to maintain the desired hydrostatic level. Thickened solids from the UF membrane are primarily sent through a glycol heat exchanger to maintain desired digester temperatures. A small side stream of membrane thickened sludge is sent to the Volute press thickener to dewater the sludge. Anaerobic digester sludge is sent to a new DAF unit and on to the Volute press thickener to dewater the sludge. The sludge is mixed in an on-site cake storage room with 2–3 day capacity in preparation for hauling offsite and disposal via land application to Department approved sites (Outfall 002). In 2019, RCRE received approval to distribute and sell its digested sludge as a commercial fertilizer (DATCP Fertilizer License No. 30-026055-022016). This landspreaded product is on average 20,248 tons per year [2020-2023] and is reported on the 3400-52 ‘Other Methods of Disposal’ form. In emergency situations, land application is available for wastewater from the Schreiber Foods East (Outfall 005), Schreiber Foods West (Outfall 004) facilities and for HSW that cannot be used for digester feed and waste activated sludge form the normal strength treatment train to Department approved sites (Outfall 003). Additionally, a new sludge emergency outfall was added (Outfall 006) that can be used to land apply sludge from the aeration tanks in the normal strength treatment train. Biogas generated from the anaerobic digesters is collected and burned in two internal combustion engine/generators to produce renewable electricity. Each engine is rated at approximately 0.85 Megawatts. In emergency situations, a flare is available to burn the biogas. Biogas scrubbers are used to clean the raw biogas and all biogas scrubber wastewater goes to floor drains after automatic drip traps. From the floor drains, the wastewater flows to the main plant building sump into the anoxic selector, but it can also be diverted to the digester if desired. The heat generated from the generators is cooled by using glycol and treated water in a closed loop system. The leftover heat is captured as much as possible to heat the sand filter building and digesters and any remaining heat is exhausted through mufflers. Note that inplant point 101 was removed from this permit. That is because the characterization of influent wastewater to the aerobic activated sludge treatment system is not needed to determine compliance. This inplant point was originally placed in to acquire influent information because it was a new facility, but this information is no longer necessary.

Permit Drafter’s Name, Address, Phone and Email: Laura Rodriguez Alvarez, DNR, 101 S. Webster St. PO Box 7921, Madison, WI, 53701, (608) 381-2628, laura.rodriguezalvarez@wisconsin.gov

Basin Engineer's Name, Address, Phone and Email: Jordan Main, 3911 Fish Hatchery Rd, Fitchburg, WI 53711, 608-535-0368, Jordan.Main@wisconsing.gov .

The Department has tentatively decided that the above-specified WPDES permit should be reissued.

Limitations and conditions which the Department believes adequately protect the receiving water are included in the proposed permit. Land application of waste shall be done in accordance with permit conditions and applicable codes. All land application sites shall be approved prior to their use. To receive a list of approved sites, or to be notified of potential approvals, contact the above-named basin engineer.

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 (608) 381-2628 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 OF PUBLISHING NEWSPAPER: Richland Observer

ADDRESS OF PUBLISHING NEWSPAPER: 172 E Court Street, PO Box 31, Richland Center, WI, 53581-0031

Date Notice Issued: November 21, 2024