


DATE: January 25, 2023

TO: Sarah Donoughe – NER/Green Bay Service Center

FROM: Michael Polkinghorn – NOR/Rhineland Service Center 

SUBJECT: Applicability Decision of Water Quality-Based Effluent Limitations for GLK Foods, LLC  
WPDES Permit No. WI-0050407-8-0

The purpose of this memorandum is to document the decision of the applicability for water quality-based effluent limitations (WQBELs) for the discharge from GLK Sauerkraut LLC (FKA Great Lakes Kraut (GLK) Foods, LLC) in Outagamie County. This secondary industrial facility discharges to a drainage ditch to Bear Creek, located in the Bear Creek – Embarrass River Watershed in the Wolf River Basin. This discharge is included in the Upper Fox and Wolf Rivers Basin Total Maximum Daily Load as approved by EPA.

GLK Foods, LLC in Bear Creek WI operates year-round to produce primarily sauerkraut. Process wastewater generated at this facility consists of water used for raw product rinsing, coring and shredding, floor washing, conveying operations, equipment cleaning, and waste brine from the fermentation vats. Can/jar cooling water used in the production facilities is typically discharged on a noncontinuous basis via Outfall 002 to a drainage ditch just west of the facility and just east of Railroad Ave. This wastewater typically infiltrates into groundwater while in the drainage ditch due to the slightly upgradient topography when it flows south towards East Flanagan Ave. Bear Creek has historically been considered for downstream protection as a conservative measure should high flow periods of surface water runoff from rain events occur during discharge.

The facility had installed a closed-loop chiller system for their can/jar cooling water process line in April 2022 and had ceased the discharge to Outfall 002. They have requested Outfall 002 remain in the reissued permit in the case of an emergency discharge should the system ever break down or requires draining for maintenance. The annual flow sums of the most recent complete years of discharge before the installation of the chiller system are 2019 – 5.6 MG, 2020 – 2.8 MG, and 2021 – 3.2 MG. These correspond to a noncontinuous discharge on an annual basis at 3 – 5 days on average per discharge event. The overall average flow from Outfall 002 during the current permit term (December 2018 – April 2022) is 23,000 gal/day not including days discharge did not occur, with a maximum of 240,000 gal/day. This is considered to be the maximum discharge magnitude for the 1-day discharge occurrence. Pictures provided by the facility show no receiving stream or standing water exist outside of stormwater in the drainage ditch in absence of Outfall 002's discharge since installation of the chiller system and are included as attachment #1. In addition the berm was reconstructed along Flanagan Ave. in 2021 which replaced/removed the drainage ditch that connected with the Railroad Ave. drainage ditch. Therefore, any emergency discharge that occurs is expected to be confined along Railroad Ave. Pictures of the berm reconstruction and the discharge pathway leading to it are also included in attachment #1.

Based on the prior information about the updated frequency/volume of the discharge, effluent characteristics, site topography, lack of an immediate receiving water stream, discharge pathway; the discharge is not expected to reach Bear Creek or any other waters of the state. **Therefore, WQBELs are not applicable to GLK Foods, LLC during the reissued permit term.** A discharge area map of Outfall 002 is included as attachment #2.

The applicability of WQBELs for the discharge will be reevaluated via permit modification or at the next permit reissuance in the event current or future facility operational changes result in the creation of fish and aquatic life habitat and/or surface water connections beyond facility property boundaries.

If there are any questions or comments, please contact Michael Polkinghorn at (715) 360-3379 or Michael.Polkinghorn@wisconsin.gov and Diane Figiel at Diane.Figiel@wisconsin.gov.

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**Outfall 002**



**Drainage Ditch – South**



Attachment #1

**Drainage Ditch w/Standing Stormwater – South**



**Drainage Ditch at SW Corner of Facility Property**



Attachment #1

**Bermed Drainage Ditch South of Flanagan Ave. – West**



**Bermed Drainage Ditch South of Flanagan Ave. – East**



