

August 1, 2019

Project Number: S-2019-0575

Warren Howard, Wastewater Operations Manager
City of Marinette
501 Water Street
Marinette, WI 54143

Subject: Approval of biosolids dewatering, disposal, and filtrate treatment system

Dear Mr. Howard:

The Department of Natural Resources (hereafter Department) is conditionally approving plans and specifications for biosolids dewatering, disposal, and filtrate treatment system at Marinette, Wisconsin, submitted under the seal of Jon Forbort, Professional Engineer, Arcadis U.S. Inc., Minneapolis, Minnesota, and received for approval on July 31, 2019.

The biosolids dewatering, disposal, and filtrate treatment system will be installed at the City's existing wastewater treatment facility for the duration of the sludge dewatering operation to prevent the discharge of per- and polyfluoroalkyl substances (PFAS). The program is anticipated to last three to six weeks.

This approval is based upon a flow rate of 300 gallons per minute.

The plans and specifications and other reports on file with the Department were used by the Department as the basis for conditional approval. The system will contain the following units:

1. (1) belt filter press
2. (2) granular media filters with combined surface area of 25 square feet, utilizing alumino-silicate media
3. (2) 8-bag filters with 1-micron bags, plumbed in parallel
4. (3) vessels, each containing 10,000 pounds of COL-GL60R Granular Activated Carbon (GAC), plumbed in series
5. Various tanks for flow equalization and for holding of process water
6. Piping, diesel pumps, pressure gauges, sampling ports, and other appurtenances

The Department understands that the following sampling regime will be followed to ensure adequate treatment and appropriate operation of the approved system:

1. Daily samples will be taken across the GAC treatment train. The samples will be analyzed for chemical oxygen demand (COD), Total Organic Carbon (TOC), and ammonia. This data will be used for process control, including to determine when the GAC must be replaced. The first sample, following startup of the system, will be used to determine that the system is operating as expected, and therefore PFAS are expected to be removed.
2. Weekly samples will be taken between GAC units two and three. These samples will be analyzed for PFAS. The breakthrough of short-chain PFAS will be taken as an indicator that the GAC must be replaced to prevent the breakthrough of longer-chain PFAS.
3. Samples will be taken every two weeks following GAC unit 3. These samples will be analyzed for PFAS to demonstrate that PFAS are not being returned to the mainstream of the City's wastewater treatment facility.

The plans and specifications are hereby approved in accordance with s. 281.41, Wis. Stats., under approval Number S-2019-0575, subject to the following conditions:

1. That a preconstruction conference be held to familiarize the construction contractor(s) and resident inspector(s) with the erosion control and dewatering requirements and all other provisions and conditions of the approved plans and specifications.
2. That a competent resident inspector be provided during the course of construction.
3. That this Department is notified when construction commences and again when the approved facilities are placed in operation. Please notify Alexis Heim Peter, wastewater specialist in the Department's Green Bay Office.
4. That an acceptable operation and maintenance manual, or a manual revision or addendum, be prepared for the approved facilities.
5. That the existing treatment facility be operated effectively during construction to ensure, at a minimum, that the preconstruction treatment levels are maintained and all provisions of the Wisconsin Pollutant Discharge Elimination System permit are met.
6. That the improvements be installed in accordance with the plans and specifications, and the above conditions, or subsequent essential and approved modifications.

The Department has the authority under s. 281.19(1), Wis. Stats., to adopt rules for the construction, installation, use, and operation of sewerage systems. Chapters NR 108 and 110, Wis. Adm. Code, have been adopted by the Department pursuant to this statutory authority. The Department has the authority to approve, conditionally approve, or deny plans under s. 281.41, Wis. Stats.

This approval is not to be construed as a Department determination on the issuance of a Wisconsin Pollutant Discharge Elimination System (WPDES) permit or an opinion as to the ability of the proposed system to comply with effluent limitations in such a permit.

Tangible personal property, which becomes a part of a waste treatment or pollution abatement plant or equipment, may be exempt from property and sales tax under ss. 70.11(21) and 77.54(26), Wis. Stats. A prerequisite to exemption under this subsection is the filing of a statement on forms prescribed by the Department of Revenue. The forms and instructions may be obtained from the Department of Revenue, Manufacturing and Telco Assessment Bureau, P.O. Box 8933, Madison, Wisconsin 53708-8933.

The plans and specifications have been reviewed in accordance with s. 281.41, Wis. Stats., for compliance with chs. NR 108 and 110, Wis. Adm. Code (or any other applicable section of the Wisconsin Administrative Code or Statutes which may be specifically referenced in the conditions above). This letter should not be construed as an approval for activities requiring approval under other Statutes or by other federal, state or local agencies.

The Department reserves the right to order changes or additions should conditions arise making this necessary.

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to s. 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with s. NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with s. NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing does not extend the 30 day period for filing a petition for judicial review.

In case construction of this improvement has not commenced or contracts awarded to complete this improvement within two years from this date, this approval shall become void. After two years a new application and plan submittal must be made and approval obtained of this or other plans before any construction work is undertaken.

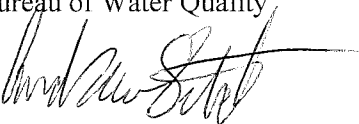
STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary



Jason R. Knutson, P.E.
Wastewater Section Chief
Bureau of Water Quality



Nathaniel Willis
Wastewater Engineer
Bureau of Water Quality



Andrew Dutcher
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cc:
Jon Forbort - Arcadis U.S. Inc., Minneapolis, Minnesota
Alexis Heim Peter - Green Bay
Adrian Stocks