STATEMENT OF BASIS

FOR THE ISSUANCE OF NPDES PERMIT WI0049794

U.S. Environmental Protection Agency
Region 5, Permits Branch
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PUBLIC COMMENT LINK	https://www.regulations.gov/docket/EPA-R05-OW-2026-3136
COMMENT PERIOD ENDS	May 18, 2026
PERMIT NUMBER	WI-0049794-6 (REISSUANCE)
DOCKET NUMBER	EPA-R05-OW-2026-3136
FACILITY NAME	Ogema Wastewater Water Treatment Facility
APPLICANT	City of Ogema P.O. Box 158 Ogema, Minnesota 56569
FACILITY LOCATION	City of Ogema WWTF 311 N Perrault St Ogema, Minnesota 56569 White Earth Township, Becker County (NW ¼ of Section 20, T142N, R41W)
RECEIVING WATER	Unnamed wetland that leads to Spring Creek and then to the South Branch of the Wild Rice River.

TENTATIVE DETERMINATION

Based on preliminary staff review and application of applicable standards and regulations, the Regional Administrator of EPA, Region 5, proposes to reissue a permit for the discharge from the City of Ogema Wastewater Treatment Facility (Ogema WWTF) subject to certain effluent limitations and special conditions. The permit is based on applications submitted January 29, 2025, and additional supporting documents found in the administrative record. The permit will be effective for approximately five years from the date of reissuance as allowed by 40 C.F.R. § 122.46.

DESCRIPTION OF APPLICANT'S FACILITY AND DISCHARGE

The above-named applicant has applied for an NPDES Permit to discharge into the designated receiving water. The facility is located within the boundaries of the White Earth Indian Reservation. The U.S. Environmental Protection Agency has retained the authority to issue NPDES permits to facilities with discharges to waters of the United States within Indian Country. The permit will be issued by the EPA under the authorities of the Clean Water Act.

The application and plans indicate that the existing wastewater treatment system consists of a municipal collection system, two lift stations, force main, and a two-cell stabilization pond system and an outfall pipe. Lift Station #1 collects wastewater from the north side of the town and pumps it to Lift Station #2. Lift Station #2 collects wastewater from the rest of the town and pumps it to a 2.8-acre primary pond. It is then released to a 1.27-acre secondary pond. The discharge is seasonal.

The facility is designed to treat an average influent flow of 25,300 gallons per day (gpd) with a five-day biochemical oxygen demand (BOD_5) of 271 milligrams per liter (mg/l) and removal of 85%.

The primary and secondary cells are each eight feet deep with two feet of sludge storage and two feet of freeboard, giving each cell a four-foot operating depth. The facility provides a total detention time of 210 days at design flow.

Wastewater is from domestic sources only. The permittee does not plan to remove any solids from the pond during the permit term.

Receiving Water

The facility has controlled discharge (Discharge 010) to an unnamed wetland that leads to Spring Creek and then to the South Branch of the Wild Rice River.

Proposed Effluent Limitations

The permittee is authorized to discharge treated municipal wastewater from Outfall 010. Outfall 010 discharges to an unnamed wetland.

Effluent Characteristics	Discharge Limitations						
	Concentration (Specified Units)				Quantity/Loading (kg/day)		
Parameter	Daily Min	Monthly Avg	Weekly Avg	Daily Max	Monthly Avg	Weekly Avg	Daily Max
Flow (MGD)	-	Report	-	-		-	-
Dissolved Oxygen (mg/L)	Report	-	-	-	-	-	-
pH (SU)	6.0	-	-	9.0	-	-	-
Total Suspended Solids (TSS) (mg/L)	-	45	65	-	35	51	-
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) (mg/L)	-	25	40	-	20	31	-
Phosphorus, Total (mg/L)	-	Report	-	-	Report	-	-
Ammonia (NH_3-N) (mg/L) (October-April)	-	Report	-	-	-	-	-
Ammonia (NH_3-N) (mg/L) (May-Sept.)	-	3.85	7.1	-	-	-	-
Ammonia (NH_3-N) (mg/L) (May-September)	-	Report	-	-	-	-	-
Nitrite Plus Nitrate, Total (as N) (mg/L)	-	Report	-	-	-	-	-
Nitrogen, Kjeldahl, Total (mg/L)	-	Report	-	-	-	-	-
Nitrogen, Total (as N) (mg/L)	-	Report	-	-	-	-	-
Sulfate (mg/L)	-	Report	-	-	-	-	-
E. coli (#/100 ml) (April 1 – October 31)	-	126	-	410	-	-	-
$CBOD_5$ percent removal (%)	$\geq$85	-	-	-	-	-	-
TSS percent removal (%)	$\geq$65	-	-	-	-	-	-
Outfall observation (yes/no)	-	-	-	-	Report	-	-

*Geometric Mean

Loading limits in the permit were calculated using the following formula based on the design flow:

$$1.27 \text{ acres} * (3.259 * 10^5 \text{ gallons/acre/foot}) * 0.5\text{ft/day} = 0.207 \text{ MGD}$$

$$0.207 \text{ MGD} * \text{limit (mg/L)} * 3.78 = \text{Loading (kg/day)}$$

BASIS FOR PERMIT REQUIREMENTS

The limits and monitoring requirements below have been developed to ensure compliance with 40 CFR parts 122 and 133 and protection of Minnesota's water quality criteria when applicable. For mass based effluent limits, a design flow of 0.207 million gallons per day (MGD) was utilized. Though not applicable at the point of discharge, the receiving water (unnamed wetland) would be classified by the state as Class 2D, 3D, 4C, 5, and 6 Water. Minnesota Pollution Control Agency issues a State Disposal System permit to this facility. It is EPA's intent that the draft permit be consistent with the MPCA permit.

Flow

Flow is to be monitored by the facility daily during discharge to ensure systems are working properly.

Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)

The facility currently maintains concentration effluent limits to comply with technology treatment standards. A monthly average limit of 25 mg/L and weekly average limit of 40 mg/L are in place to maintain compliance with the secondary treatment standards for BOD_5, see 40 C.F.R. § 133.102. Alongside these concentration effluent limits, the facility has a technology based 85% removal requirement. The facility's effluent has remained far below these limits throughout the entire permit, with a maximum recorded effluent value of 7.6 mg/L. Because there are less than ten recorded samples, a 0.6 coefficient of variation (CV) was used for the reasonable potential determination. A review of the receiving water status identified that the receiving water is not impaired for dissolved oxygen or eutrophication. Therefore, the technology-based effluent limits shall continue into the next permit issuance.

Total Suspended Solids (TSS)

The facility maintains concentration effluent limits for TSS to comply with technology treatment standards. A monthly average limit of 45 mg/L and weekly average limit of 65 mg/L are in place to maintain compliance with the equivalent to secondary treatment standards for TSS, see 40 C.F.R. § 133.105. In conjuncture with these requirements, the facility must also remove 65% of TSS from the effluent prior to discharge. Equivalent to secondary treatment standards are permissible for facilities that utilize waste stabilization ponds as the principal process, see 40 C.F.R. §133.101(g)(2). The facility's effluent has been consistently below these limits throughout the entire permit, with a maximum recorded effluent value of 14 mg/L. Because there are less than 10 recorded samples, a CV of 0.6 was used for the reasonable potential determination. A review of the receiving water status identified that the receiving water is not impaired for turbidity and/or excessive sedimentation. Therefore, the technology-based effluent limits shall continue into the next permit issuance.

Ammonia Nitrogen, Total (as N)

In reissuance of this permit, the facility was evaluated against EPA's Clean Water Act section 304(a) criteria and MPCA's WQS. The facility's discharge had a maximum recorded ammonia

concentration of 3.66 mg/L, an average of 0.84 mg/L and a median value of 0.295 mg/L. The facility demonstrates notable ammonia effluent variation with a CV of 1.3. Ammonia criteria are temperature and pH dependent. Utilizing temperature data collected by USGS from nearby comparable waters, and the facility's average pH during the summer season, EPA found there to be reasonable potential for the facility to exceed EPA's 304(a) chronic aquatic life criteria for ammonia. Considering the facility discharges to a wetland with limited dilution, EPA's WQBELs utilize a 3:1 dilution, resulting in a chronic wasteload allocation of 1.64 mg/L. Because EPA's 304(a) chronic ammonia criteria is based on a 4-sday duration average, the long-term average calculations were slightly altered to account for a longer duration averaging period. EPA identified an average monthly limit of 3.85 mg/L NH_3 and a maximum daily limit of 7.1 mg/L NH_3 to be protective of the chronic aquatic life criteria. These limits were calculated using a 99% probability basis.

Because reasonable potential was identified during summer months where ambient receiving water temperatures are highest, the permittee is only required to meet these limits during the period of May through September. Otherwise, monitoring only is required during discharge outside of these months.

Nitrogen (Nitrite Plus Nitrate, Total Kjeldahl Nitrogen, Total Nitrogen)
Nitrogen is a pollutant that may negatively impact waters, including water used for drinking. Studies have identified that high nitrogen concentrations in lakes and streams can produce toxic effects on aquatic life. Like phosphorus, nitrogen is a nutrient that promotes algae and aquatic plant growth often resulting in decreased water clarity and oxygen levels. In 2014 the MPCA provided a Statewide Nutrient Reduction Strategy which identifies goals and milestones for nitrogen reductions for sources of nitrogen in Minnesota. As part of this identification process, the Ogema WWTF has been required to conduct grab samples of influent and effluent Nitrite Plus Nitrate, Total Kjeldahl Nitrogen, and Total Nitrogen. Monitoring will continue into the next permit term.

Dissolved Oxygen
The permit currently has dissolved oxygen (DO) monitoring requirements, requiring the facility to monitor dissolved oxygen whenever they discharge. Effluent DO values are high with the minimum value being 6.18 mg/L and a median recorded value of 9.18 mg/L. There are no water quality criteria applicable at the point of discharge for DO and the current $CBOD_5$ effluent limits should be protective of Minnesota's DO standard, which is applicable 11 miles downstream. Because no reasonable potential was found for the facility to exceed DO criteria, no new limits are proposed. To ensure continued compliance with water quality standards, the facility shall continue to monitor DO.

E. coli
The limits for *E. coli* are based on the EPA's 2012 Recreational Water Quality Criteria. The geometric mean of samples collected over a 30-day period shall not exceed 126 *E. coli* per 100 milliliters (ml). The statistical threshold value of 410 *E. coli* per 100 ml is set as the daily

maximum. The limits are applicable April through October. Monitoring data indicates the permittee is in substantial compliance with the limits.

Total Phosphorus (mg/L)
Phosphorus is a common pollutant in many wastewater discharges that has the potential to negatively impact the quality of Minnesota's lakes, wetlands, rivers, and streams. Phosphorus promotes algae and aquatic plant growth often resulting in decreased water clarity and oxygen levels. In addition to creating general aesthetic problems, these conditions can also impact a water body's ability to support healthy fish and other aquatic species. Therefore, phosphorus discharges are being carefully evaluated throughout the State.

MPCA re-evaluated phosphorus for potential impacts to the Wild Rice River in the development of the 2021 State Disposal System (SDS) permit and no limits were proposed. The Wild Rice River downstream is not impaired for phosphorus or nutrients. The current SDS permit contains a phosphorus management plan. No limits are proposed for the Ogema WWTF in the NPDES permit. However, monitoring and implementation of the Phosphorus Management Plan will continue in the next NPDES permit issuance.

pH
The limits for pH are based on secondary treatment standards pursuant 40 CFR part 133. Monitoring data indicates the permittee is in substantial compliance with the limits.

Sulfate
Sulfate is a common pollutant in many wastewater discharges that has the potential to negatively impact the quality of Minnesota's lakes, wetlands, rivers, and streams. Waters containing wild rice are especially sensitive to excess sulfate. Wild rice is recognized as Minnesota's official state grain and is a biological, economic, and cultural resource to many, particularly members of tribal nations in Minnesota. The Ogema WWTF is not currently listed as upstream of any wild rice waters, according to MPCA's 'Wild Rice Producing Waters Tool'. However, MPCA's surveys for wild rice have been steadily identifying new wild rice waters throughout the state. Because Ogema has not previously conducted sulfate monitoring, in accordance with the MPCA's 2023 Sulfate Wastewater Permit Implementation Plan, sulfate monitoring will be required for Ogema on a 1 x half year basis.

Asset Management – Operation & Maintenance Plan
Regulations regarding proper operation and maintenance are found at 40 C.F.R. § 122.41(e). These regulations require, "that the permittee shall at all times operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit." The treatment plant and the collection system are included in the definition of "facilities and systems of treatment and control" and are therefore subject to the proper operation and maintenance requirements of 40 C.F.R. § 122.41(e).

Similarly, a permittee has a "duty to mitigate" pursuant to 40 C.F.R. § 122.41(d), which requires the permittee to "take all reasonable steps to minimize or prevent any discharge in violation of the permit which has a reasonable likelihood of adversely affecting human health or the environment."

The draft permit requirements are the first steps of an asset management program which contains goals of effective performance, adequate funding, adequate operator staffing and training. Asset management is a planning process that ensures that you get the most value from each of your assets and have the financial resources to rehabilitate and replace them when necessary, and typically includes five core elements which identify: 1) the current state of the asset; 2) the desired level of service (e.g., per the permit, or for the customer); 3) the most critical asset(s) to sustain performance; 4) the best life cycle cost; and 5) the long term funding strategy to sustain service and performance.

EPA believes that requiring a certified wastewater operator and adequate staffing is also essential to ensure that the treatment facilities will be properly operated and maintained. Mapping the collection system with the service area will help the operator better identify the assets that he/she is responsible for and consider the resources needed to properly operate and maintain them. This will help in the development of a budget and a user rate structure that is necessary to sustain the operation. The development and implementation of a proactive preventive maintenance program is one reasonable step that the permittee can take to demonstrate that it is at all times, operating and maintaining all the equipment necessary to meet the effluent limitations of the permit.

ADDITIONAL SPECIFIC CONDITIONS

1. Continued implementation of an Operation & Maintenance Plan
2. Sludge Disposal Requirements
3. Industrial Waste Pretreatment Program
4. Additional Maintenance (Dikes must be maintained and vegetation cut)
5. Disinfection
6. Phosphorus Management Plan
7. Re-opener clause for per- and polyfluoroalkyl substances (PFAS)
8. Pollutant Minimization Program for Sulfate required if MPCA identifies the permitted facility to be upstream of wild rice waters

SIGNIFICANT CHANGES

- Changes to EPA Region 5 contacts have been made throughout the permit
- *Stabilization Pond* requirements have been updated. (Part II.A)
- New ammonia limits summer, May-September. (Part II.B)
- *Narrative Standards* have been changed to *Narrative Limitations* and language has been revised for clarity. (Part II.B)
- New monitoring added for sulfate. (Part II.B)

- New *Pollutant Minimization Plan for Sulfate* is included. (Part II.E)
- *Operation and Maintenance Plan* requirements have been updated. (Part II.E)
- *Sludge Disposal Requirements* have been updated. (Part II.E)
- *Industrial Waste Pretreatment Program* requirements have been updated. (Part II.E)
- Reopener clause to include additional requirements for PFAS. (Part II.E)
- Part III, *Standardized Conditions for NPDES Permits*, has been revised.
- Requirements for electronic submittal of DMRs (through NetDMR) have been added. (Part III.C)

SECTION 401 WATER QUALITY CERTIFICATION

EPA is the appropriate authority for purposes of certifying the proposed discharge under Section 401 of the CWA within the White Earth Indian Reservation and will be unless and until the White Earth Indian Reservation is approved for Treatment as a State (TAS) for CWA Sections 303 and 401. EPA is in the process of certifying pursuant to Section 401. EPA believes the effluent limitations included in the draft permit meet tribal and state water quality requirements where they are applicable. The draft certification is available for review. We have discussed our reissuance of the permit with the White Earth Indian Reservation, the Minnesota Pollution Control Agency, and the permittee.

The permit will be effective for approximately five years from the date of reissuance as allowed by 40 C.F.R. § 122.46.

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