

Permit No. MI0060338

FACT SHEET

PERMITTEE / SITE NAME: Salem Township / Salem Twp USD WWTP

COUNTY: Washtenaw

DESCRIPTION OF PROPOSED WASTEWATER TREATMENT FACILITIES

Salem Township is proposing to construct a wastewater treatment plant to serve the Salem Township Urban Service District. The facility will have an annual average design flow rate of 0.84 million gallons per day (MGD). Wastewater flow entering the plant will first enter an equalization basin. Following influent flow equalization, wastewater will receive preliminary treatment through screening and grit removal. Flow will then be directed to a suspended growth membrane bioreactor (MBR) biological treatment process. Prior to entering the aerobic MBR tanks, flow will first pass through anaerobic and anoxic zones to help facilitate biological phosphorus removal. Additionally, a coagulant will be added to the MBR to aid with phosphorus removal. Following the MBR, flow will be disinfected using ultraviolet light and aerated prior to being discharged to Fellows Creek. Solids generated during the treatment process will be thickened, dewatered, and stored prior to being disposed of at a landfill.

MAP OF DISCHARGE LOCATION

Facility Coordinates: Latitude 42.364941, Longitude -83.550205



RECEIVING WATER

Fellows Creek is protected for agricultural uses, navigation, industrial water supply, public water supply in areas with designated public water supply intakes, warm-water fish, other indigenous aquatic life and wildlife, partial body contact recreation, total body contact recreation (May through October), and fish consumption.

The receiving stream flows used to develop effluent limitations are a 95 percent exceedance flow of 0 cfs, a harmonic mean flow of 0 cfs, and a 90-day, 10-year low flow of 0 cfs.

MIXING ZONE

For toxic pollutants, the volume of Fellows Creek used to ensure that effluent limitations are sufficiently stringent to meet Water Quality Standards is not more than 25 percent of the receiving water design flow for lotic systems, in accordance with R 323.1090(2).

For other pollutants, the volume of Fellows Creek used to ensure that effluent limitations are sufficiently stringent to meet Water Quality Standards is the applicable design flow of the receiving stream.

PROPOSED EFFLUENT QUALITY: (from complete application received November 22, 2023)

Parameter	Minimum Daily	Maximum Monthly Average	Maximum 7-Day Average	Maximum Daily	Units
Carbonaceous Biochemical Oxygen Demand (CBOD5)	---	4	---	10	mg/l
Total Suspended Solids (TSS)	---	20	---	---	mg/l
Ammonia Nitrogen (as N)	---	0.5	---	2.0	mg/l
Total Phosphorus (as P)	---	0.1	---	---	mg/l
Fecal Coliform Bacteria	---	200	400	---	cts/ 100 ml
Temperature, Summer	---	---	---	75	°F
Temperature, Winter	---	---	---	55	°F
Oil & Grease	---	---	---	10	mg/l
pH	6.5	---	---	9.0	S.U.
Dissolved Oxygen	8.0	---	---	---	mg/l

PROPOSED EFFLUENT LIMITATIONS: (see draft permit)

BASIS FOR PROPOSED EFFLUENT LIMITATIONS: (see Basis for Decision Memo)

ADDITIONAL INFORMATION

The Department of Environment, Great Lakes, and Energy proposes that the applicant's Antidegradation Demonstration, based on information required by Subrule (4) of R 323.1098, shows that lowering of water quality is necessary to support the identified important social and economic development in the area. In no event may this decision allow water quality to be lowered below the minimum level required to fully support the designated uses. This determination is solely for purposes of satisfying state water quality regulations and is not intended to supplant local requirements, including land use or zoning laws. It is not, and should not be construed as, a finding by the Department of Environment, Great Lakes, and Energy that the proposed development meets local requirements or ordinances.

REGISTER OF INTERESTED PERSONS

Any person interested in receiving notification by e-mail of National Pollutant Discharge Elimination System (NPDES) or state surface water discharge permitting actions may register with the Permits Section of the Department of Environment, Great Lakes, and Energy (Department). To register, e-mail the contact identified below with your full name and the request that you be added to the Department's Public Notice Notification List. Once you are added to the list, you will receive an e-mail notification for every public-noticed NPDES or state surface water discharge permitting action in the state (or only those for which you've expressed a specific interest) unless/until you ask to be removed from the list.

PUBLIC COMMENT

Persons wishing to submit comments should do so through MiEnviro Portal. Go to <https://mienviro.michigan.gov/ncore/>, select 'Public Notice Search,' search for this public notice by entering the permit number into the search field, click 'Search,' click 'View,' click 'Add Comment,' enter information into the fields, and then click 'Submit.' Comments or objections to the draft permit and proposed decision concerning the Antidegradation Demonstration received by **April 14, 2024**, will be considered in the final decision to issue the permit, as will comments made at a public hearing should one be held by the Department on the draft permit.

If a public hearing is scheduled, public notice of the hearing will be provided at least 30 days in advance. The hearing will normally be held in the vicinity of the discharge. Inquiries should be directed to Tom Braum, Permits Section, Water Resources Division, Department of Environment, Great Lakes, and Energy, P.O. Box 30458, Lansing, Michigan 48909-7958; telephone: 517-331-7377; or e-mail: BraumT2@michigan.gov.