



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



C. HEIDI GRETHER
DIRECTOR

October 17, 2018

Mr. David Conger
Milan WWTP
75 Gump Lake Road
Milan, Michigan 48160-1500

Dear Mr. Conger:

SUBJECT: Septage Receiving Facility Operating Plan Approval
Milan Wastewater Treatment Plant
Septage Receiving Facility

Review of the Milan Wastewater Treatment Plant septage waste operating plan by the Department of Environmental Quality (DEQ) is complete. The operating plan is approved and meets the requirements outlined in Section 11715b of Part 117, Septage Waste Servicers, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

The receiving facility must operate in accordance with the approved plan. If a change in operations or conditions is anticipated, please file an amendment to the plan at least thirty (30) days prior to the proposed date for implementation.

If the receiving facility is regularly unable to accept and treat the septage generated from contracted septage haulers due to capacity issues, contact our office to discuss options.

Thank you for your continued environmental stewardship and service to those with on-site wastewater systems in and around your community and those who service them. If you have any questions regarding this matter, please contact me 517-256-6953; merricleg@michigan.gov; or DEQ, Drinking Water and Municipal Assistance Division, P.O. Box 30817, Lansing, Michigan 48909-8311.

Sincerely,

Greg Merricle
Septage Program Coordinator
Drinking Water and Municipal Assistance Division
merricleg@michigan.gov
517-256-6953

cc: Ms. Kristen Schweighoefer, Environmental Health Director, Washtenaw County Department of Public Health
Ms. Tiffany Myers, Supervisor, Jackson District Office, Water Resources Division, DEQ

*Milan Wastewater Plant
And
Septage Receiving Facility*

Septage Receiving Operational Plan



I. Authority:

This operating plan has been developed in accordance to the regulatory requirements and is established pursuant to Act 381 PA of 2004 and Part 117 of 1994 PA 451, as amended, being MCI 324.11701 et seq., and the rules promulgated there under by the Michigan Department of Environmental Quality.

II. Definitions:

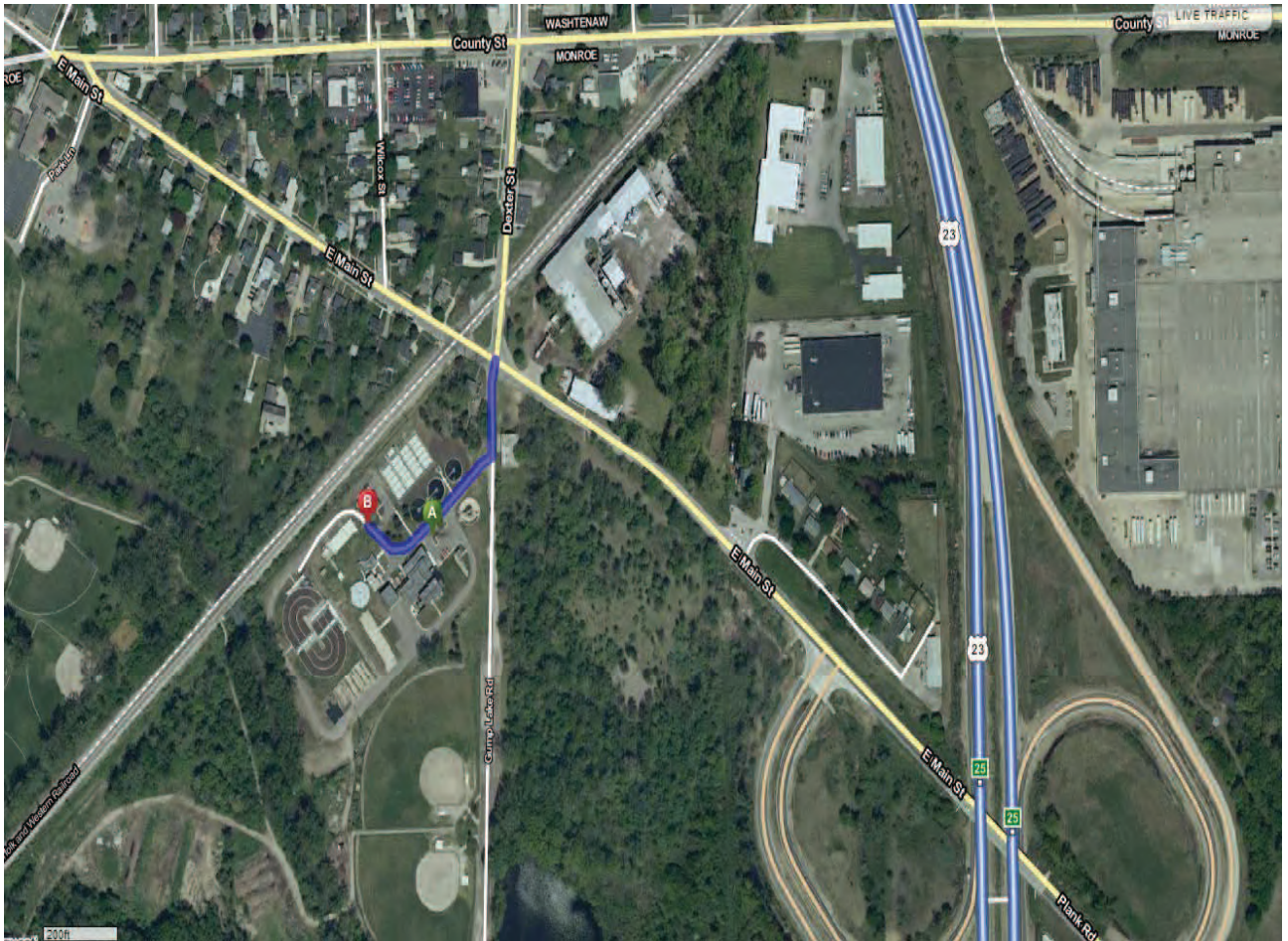
- (a) “Domestic septage” means liquid or solid material removed from a septic tank, cesspool, portable toilet, type III marine sanitation device, or a similar storage or treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar facility that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease interceptor, grease trap, or other appurtenance used to retain grease or other fatty substances contained in restaurant waste.
- (b) “Septage Receiving Facility procedures manual” means specific criteria established by the City of Milan detailing procedures for such items as; registration and insurance requirements of licensed septage haulers, sampling requirements, billing procedures, capacity priority, and general operation and maintenance for the City of Milan Receiving Facility.
- (c) “Operating plan” means a plan developed in accordance with PA 381 of 2004 by the City of Milan for receiving septage waste that specifies the location; categories of septage waste that will be received; capacity; the service area; and hours of operation.

III. Purpose:

This Operating Plan sets forth the rules for the operation of the Facility, owned by the City of Milan, for the purpose of receiving septage waste from licensed septage waste haulers that are either contracted or registered and bonded with the City of Milan Septage Receiving Facility.

IV. Location:

The City of Milan Septage Receiving Facility is located at the Milan Wastewater Plant located at 75 Gump Lake Road Milan, MI. 48160, see attached map on page 3. The wastewater office phone number is 734-439-



2408. The trucked septage will be unloaded at point “B” on the map (see photo 1 above), via hose in the manhole upstream from the raw sewage pump building. The manhole is located just outside the raw building; it is deep and surrounded by pavement. (see photo 2 below)



V. **Service Area:**

The Facility shall receive and dispose of septage waste generated in:

1. The Facility will receive septage waste generated outside the service area, provided that adequate capacity is available to collect septage waste generated within the service area defined in one above. Septage waste generated within the City of Milan shall have first priority for capacity should peak demand exceed system capacity.
- 2.

VI. **Categories of Septage Waste:**

The facility will only accept domestic septage as defined in section 2.

Sampling:

We will sample every load until a baseline of pollutants can be established for each hauler.

There will be a minimum of four samples taken. After we have established a baseline of the waste we will continue to collect a sample from each load that arrives at the plant. A pH test and a visual inspection will be conducted before the waste is accepted. The sample will be stored for a period of seven day at a temperature between 2-6 degrees C.

Randomly, throughout the year, a sample from each hauler will be analyzed for typical pollutants and metals; this will be done a minimum of four times a year for each hauler.

VII. **Regulatory Structure:**

Septage haulers are regulated by Section 24-109, Hauled Wastewater, of the Milan Sewer Use Ordinance. The Milan Sewer Use Ordinance is posted on the City of Milan website.

VIII. **Capacity:**

The basis of design for the Milan WWTP indicates the following capacity for treatment:

The maximum 24 hour flow capacity is 6.50 MGD with an average daily flow of 2.50 MGD.

The Milan Wastewater Plant's current average raw sewage loadings and design parameters are shown in the following chart.

	Design Capacity	Current Averages
Flow	2.50 MGD	1.25 MGD
CBODs 5-day	3960 lbs/day	1647 lbs/day
TSS	3960 lbs/day	1658 lbs/day

The Milan WWTP is currently receiving flows and loadings of wastewater at rates considerably less than the design average capacity. The annual average load from June 1, 2016-May 31, 2017 is 1647 lbs/day for BOD and 1658 lbs/day for suspended solids. Considerable treatment capacity is currently available for assimilation of potential load increases from receiving septage.

A preliminary assessment of the potential impact of septage handling on the WWTP operations was performed in 2012. The degree of impact on the plant operation will depend on the quality of septage material received by the facility and the available treatment capacity and biomass volume on the media. The potential quality of septage that may be received on a regular basis is unknown.

The WWTP currently has sufficient reserve capacity to accept to accept 7,420 gallons of septage a day. The current annual average BOD load to the plant from wastewater is approximately 2313 lbs/day less than the design average for the facility. The suspended solids load is approximately 2302 lbs/day less than the design average. The plant should be able to readily assimilate and treat septage loads up to the annual average design loading of the system. The BOD component of the waste would be the most critical parameter of concern regarding treatment potential.

Testing:

Test and cost of testing; It is required that we monitor to some degree everything that comes into the plant, so we can meet our discharge permit limits. At a minimum, the City of Milan will randomly test each hauler four times a year for the following parameters at a cost of each test that will be borne by the hauler in the disposal fee of the septage. This testing will insure compliance and give the City a data baseline for future costing on receiving and treating septage and testing requirements. These samples will be tested at a minimum for the following parameters and their current estimated costs.

Total Suspended Solids	\$20
Phosphorus	\$32
5-day CBOD	\$40
Ammonia	\$26

pH	\$5
Fats, Oil, and Grease	\$40

Total heavy metals specifically	
Copper /Lead	\$90
Mercury	\$90

Based on the information currently available, the following assumptions can be made.

1. Adequate septage treatment capacity is available at the WWTP. As determined by the MAHL study conducted in 2018.
2. Testing of every truck load would be prohibitively expensive. Each hauler will be sampled a minimum of four times a per year for routine parameters would be sufficient unless adverse impacts are noted.
3. No waste classified as hazardous under RCRA will be permitted for disposal at the WWTP.
4. All domestic septage haulers will be permitted, prior to dumping any septage at the WWTP.

Hydraulic Capacity

The Facility has an average design hydraulic capacity of 2.50 million gallons per day. Septage will be introduced into influent sewer coming into the Milan WWTP for final treatment and disposal in accordance with the City’s NPDES permit.

Wet Weather Operation

In the event we have severe storms, we will halt receiving of hauled septage and utilize our equalization basin to handle the additional incoming sewage from the system.

Nutrient/Organic Capacity

The City of Milan Septage Receiving Station is a manhole immediately at the head of the plant. The Facility is a collection and transport node to the City’s Wastewater Plant, which ultimately treats the septage waste. The Milan Wastewater Treatment Plant is governed by its current NPDES discharge permit, which defines the allowable loading rates. Projected loadings from the septage Facility are within the allowable loadings in the current City’s NPDES permit.

IX. Facility Features

Receiving: Deliveries are received at the City's existing wastewater treatment plant, using a drive-thru pattern. Access to the facility is made by use of access to the site from Gump Lake Road. Once inside the grounds, the driver will follow the driveway around to the septage receiving site located past the administrative building toward the North side of the plant. The hauler connects the septage truck via the use of a cam-lock coupling and a 4" discharge hose. The hauler must pull up around the corner of the primary service building for disposal into the manhole ahead of the Raw Sewage pump station. This will require no modification to the current design of the treatment plant. If a modification is needed a Part 41 permit will be required.

Treatment: Waste will pass through the existing bar screen and into the Raw Sewage wet well. It will mix with the raw sewage and be pumped into the treatment plant for treatment.

X. Hours of Operation and Emergency Contact

Currently, the hours will be limited to the hour's plant personnel are on site. These hours of operation for the facility are Monday – Friday 7:00 a.m. to 3:00 p.m. The emergency contact person is David Conger, Project Superintendent. Office, 734 439 2408, Cell 734 829 8084.

XI. Septage Waste Haulers

The Facility shall only receive septage waste from a licensed septage waste hauler using a licensed septage waste vehicle. Each hauler must also be registered with the City of Milan. Each septage waste hauler disposing of septage waste in the Facility shall submit proof of insurance listing City of Milan as an additionally insured and carrying the following policies:

- (a) Vehicle Liability: \$300,000 Limit of Liability per occurrence.
- (b) Commercial General Liability: Bodily Injury, Property Damage & Property Damage per occurrence and/or aggregate; \$1,000,000.
- (c) Worker's Compensation: in accordance with all applicable statutes of the State of Michigan.

XII. Operator

The Facility will be operated by the City of Milan.

XIII. Operating Conditions

- (a) Access: Access to the Facility by licensed septage waste haulers shall be made solely from Gump Lake Road.
- (b) Transfer: The transfer of septage waste from a septage waste vehicle to the Facility will occur at the Facility using a drive-through traffic pattern. Each transfer of septage waste from a septage waste vehicle will be through a 4" hose firmly connected to the Facility.
- (c) Discharge: Septage waste received at the Facility will be discharged into the City of Milan sewer system immediately upstream of the City's Wastewater Treatment Plant for treatment.
- (d) Testing: Septage waste received at the Facility will be tested by the City and an outside lab of their choosing at a minimum for the parameters listed in Section VIII, Testing.
- (e) Maintenance: All components of the Facility will be operated and maintained in good condition and repair, per manufacturer's recommendations, and in compliance with local, state and federal standards, rules and regulations generally applicable to septage waste receiving facilities. Due care will be taken to prevent nuisance conditions, including but not limited to the use of odor control technologies, good housekeeping practices, and the initiation of a preventative maintenance program.

XIV. Fees and Billing

All fees / account will be paid / processed at City Hall located at 147 Wabash street Milan MI, 48160. Prepay tickets will be issued for disposal, account holders will be billed monthly for disposal fees. The WWTP does not accept payment. Staff at the treatment facility will mark tickets with the capacity of the tank as the disposal amount. All tanks will be billed as full, regardless of any empty space in the tank.

- 1) Hauler of domestic septage as described above will pay fixed charge based on the full capacity of the haulers tank multiplied by the appropriate gallon rate. The gallon rate annual OM&R (operation, maintenance and debt repayment) this will

include the cost of a receiving station to be built in the near future. The Facility will charge a fee for receiving septage waste, which fee shall not exceed the actual costs of operating the Facility, including the reasonable cost of doing business as defined by common accounting practices. A fee for processing and truck registration fees will be assessed at the time of application submittal. Truck fees cover registration, stickers, proximity cards, and the administration associated with tracking individual trucks and accounts. Additionally, these fees are designed to cover City Pollution Liability Insurance. Consequently, the Hauler is not responsible for maintaining a pollution liability insurance policy, or for posting a bond with the City. The initial charge per gallon of septage is estimated at **\$0.075** (\$7.50 per 100 gal), and may be subsequently modified by the city and approved by DEQ.

XV. Approval and Modification

This Operating Plan shall not take effect until approved by the Michigan Department of Environmental Quality (MDEQ). Any major modifications to this Operating Plan must also be approved by the MDEQ.