

ALLEGAN WASTEWATER PLANT AND SEPTAGE RECEIVING FACILITY

SEPTAGE RECEIVING OPERATIONAL PLAN

This plan has been developed in accordance to the regulatory requirements of Part 117, Septage Waste Servicers, of the Natural Resources and Environmental Protection Act, 1994 PA 451. The Allegan Wastewater Plant will start excepting domestic sewage and pre-approved industrial waste. The acceptance of this septage will provide a valuable service to the Allegan area. This Septage Receiving Operation Plan has been prepared pursuant to the requirements of Section 324.11715b.

Location

The Allegan Septage Receiving Facility is located at the Allegan Wastewater Plant located at 350 North St. Allegan, MI 49010 see attached map on page 6.

Background

The Allegan Wastewater Plant average raw sewage loadings and design parameters are shown in the following chart.

	Design	Average
Flow	1.2 MGD - NPDES, 1.8 MGD Max Day	.8 MGD
CBOD5	12,000 lbs / day	2,895 #/day *
TSS	6,005 lbs/day	2,993 #/day *

* Averages are January 2009 through January 2010. Averages for TSS and CBOD5 may be abnormally high due to influent bypass pumping that did not have fine screening or grit collection.

The Allegan Wastewater Plant is a secondary aeration treatment process plant, updated in 2009 with biological nutrient removal capabilities, new headworks equipment, larger aerated sludge storage tanks, UV disinfection and a new septage receiving station. The Allegan Waste Water Treatment Plant is regulated by the DNRE under NPDES permit MI0020532.

Septage Receiving Station Location and Description

The septage receiving station will be accessed by entering the Allegan Wastewater Plant facility through the East gate. This gate is equipped with remote operation that will be able to track each truck as it enters the facility. Once the truck passes through the gate it will continue around the outside drive, around basin 3, between the facility garage and UV disinfection chamber. The receiving station is located behind or to the West of the garage. The truck will turn left and pull up along the front of the receiving building.

There the driver will see the receiving port and control panel for the receiving equipment and park his truck accordingly to unload. The receiving equipment consists of a rock trap, automatic flow control valve, flow meter and fine screen. The equipment was designed so

a grinder unit and/or an auto sampler could be added. The fine screen will convey and dewater the screenings into a receptacle for disposal at a landfill. Each truck will be issued an individual card to activate this equipment. The equipment will then track each truck load and volume discharged. The screened septage is then discharged to the waste solids mix tank. The entire WWTP facility from the entrance gate to the septage receiving area will be under video surveillance and recorded at all times.

Septage Treatment Process

The Allegan Wastewater Plant Septage Receiving Facility will have a 400 (+/-) gpm max. unloading rate with an anticipated 50,000 gallons per day. Domestic septage is anticipated at 6,000mg/l BOD and 14,000mg/l TSS. The Allegan Wastewater Plant Septage receiving does not place the initial loading of the septage into the treatment process. Instead the septage is mixed with the waste activated sludge from the secondary clarifiers. This mixture of waste sludge and septage is jet aerated in two (2) 90,000 gallon tanks. This mixture is then transferred to an aerated sludge storage tank where the sludge is aerated, mixed and thickened by settling. The decant from the aerated sludge storage tanks is then taken back to the head of the treatment process. The thickened sludge which will be a mixture of waste sludge from the treatment process and septage solids will be disposed of by land application twice per year in accordance with the state of Michigan Biosolids Part 24 Rules. See attached flow diagram on page 5.

Septage Receiving Hours of Operation

The operating hours for the receiving station will be 24 hours per day and 7 days a week with an approved application for discharge and issuance of the proper access remote and key card for operation of the receiving equipment. Each hauler will be required to fill out a credit application for proper billing, provide proof of proper insurance and provide a performance bond if required by the City. Upon approval of this the hauler will be issued a remote to access the WWTP facility and a swipe card to operate the receiving equipment. Haulers that do not go through this process will only have access to the receiving station during normal business hours of Monday – Friday, 7 a.m. – 3 p.m., and weekends from 7 a.m. – 11 a.m., no holiday (as defined by the City Municipal Policy manual) dumping. Individual dumping of recreational vehicle holding tanks will only be allowed during normal business hours.

Septage Accepted

Septage and hauled waste can be a high variety of materials, which may include grit, organics, suspended solids, and grease. The Allegan Wastewater Plant Septage Receiving facility will accept the following: (a) domestic septage pumped from home septic tanks, recreational vehicles (RV's), cesspools, portable toilets, type III marine sanitation devices or similar storage; (b) domestic treatment plant septage; (c) sanitary sewer cleanout septage.

Every load that is brought to the Allegan Septage Receiving station must be accompanied by a "Hauled Waste Tracking and Discharge Ticket." The information required shall include identification of the hauling company, truck and driver I.D., origin of septage

discharge, including name and address of each location pumped in the truck load and time and date the septage tank(s) were pumped out.

Other Wastes Excepted

The Allegan Waste Water Treatment Plant Septage Receiving Station will accept the following wastes under the following conditions:

Recreational Vehicle (RV) holding tanks, directly from the RV, will be accepted during normal Wastewater Plant operating hours of Monday – Friday 7:00 a.m. – 3:00 p.m., no holidays or weekends.

Grease trap waste will only be excepted if it is mixed with domestic septage at a ratio of not less than 1 part grease trap waste to 3 parts domestic septage and approved by the Wastewater Plant Superintendent prior to discharge. Properly mixed grease trap waste will only be accepted during normal Wastewater plant hours of Monday – Friday 7:00 a.m. – 3:00 p.m., no holidays or weekends. This load will need to have a sample of not less than 1,000ml taken during off loading.

Industrial Waste will be accepted from a licensed industrial waste hauler (Part 121 license from the DNRE's Waste and Hazardous Materials Division) only. Each load of industrial waste must be approved by the Allegan Wastewater Superintendent prior to delivery to the receiving station. The industrial waste may only be disposed of during normal wastewater plant operating hours Monday – Friday 7:00 a.m. – 3:00 p.m., no holidays, unless special approval is given for after hours discharge on a per load basis. All industrial waste will be sampled during off loading. A copy of all manifests for industrial waste load will be provided to the Allegan Waste Water Treatment Plant at the time of discharge.

Sampling

The sampling of domestic septage will be on a random basis. The City of Allegan reserves the right to sample any and all domestic septage discharged to the Allegan Waste Water Treatment Plant. Sampling is required for each load of domestic septage that is mixed with restaurant grease trap waste. Sampling is required for each load of industrial waste.

Regulatory Structure

Septage haulers are regulated by the Septage Receiving Station Ordinance. The Allegan Septage Receiving Station Ordinance is posted on the City of Allegan website, www.cityofallegan. On the web site click on Civic, at the top of the page, on the civic page the septage ordinance and septage operation plan are located below the “Only One Allegan” logo.

Fee Structure

The fee structure will be set in the Allegan Municipal Policy. The basis for the fee structure will be as follows:

- 1) Individual Recreational Vehicle will pay a per time dump fee comparable to the local campground dumping station. Charge will be \$10.00 per dump.
- 2) Haulers of domestic septage as described above will pay a per gallon charge based on annual OM&R (operation, maintenance and debt repayment) this includes costs of the receiving station, a portion of the treatment facility that is handling the solid's disposal, and the processing of supernatant from the solids handling. In addition, the rates are structured to include debt repayment from the loan in 2009 to build the receiving station. The rate will be set at \$0.07 per gallon. A discount will be given for pre paying based on the following chart:

	prepay/gal	prepay rate
Prepay	100,000	\$0.069
Prepay	250,000	\$0.068
Prepay	500,000	\$0.067
Prepay	750,000	\$0.066
Prepay	1,000,000	\$0.065

- 3) Industrial hauled waste (pre-approved before discharge) shall be a combination of #2 above (no prepay allowed) and shall also include a surcharge for excess BOD and/or suspended solids. This excess shall be based on the defined strength of domestic septage of BOD = 6,000 mg/l, TSS 14,000mg/l. Any amount over these will be charge at a rate of \$0.07/# BOD and \$0.04/# TSS.
- 4) Grease trap waste blended with domestic septage (1 to 3 ratio) will be charge a rate of \$0.10 per gallon due to the increased handling of the grease.

The City of Allegan reserves the right to change any and all fees for the septage receiving facility, any increase in rates will be posted a minimum of 30 days prior to increase.

Service Area

The service area is 15 radial miles from the geographic center of the plant and beginning on October 1, 2010, the service area will extend to 25 radial miles. This service area for the Allegan Septage Receiving Facility will include Allegan County and portions of Barry, Kalamazoo, Kent, Ottawa, and Van Buren counties. The service area will cover the 25 mile geographic area that comes into affect October 1, 2010. See attached map showing service area coverage's on page 7.