

CITY OF SAGINAW



September 2, 2010

Matt Campbell
Septage Program Coordinator
Environmental Resource Management Division
Constitution Hall, 525 W. Allegan St.
P.O. Box 30473
Lansing, MI 48909-7973

Dear Mr. Campbell,

Enclosed please find the following:

- ✓ A copy of the Revised Septage Receiving Plan for the City of Saginaw including a detailed service area map.
- ✓ A copy of the Non Domestic Wastewater section from our N.P.D.E.S permit application, which was submitted in March of this year. This information shows that we have adequate capacity to handle an expanded service area.

As you are aware we recently updated our Septage Receiving Plan to reflect a rate increase. At that time we included language to include the expanded service area effective October 1, 2010. The revised plan has been posted on our website. Please let us know if you would like an electronic copy of the plan for your website.

Thank-you for your help in the development of this plan.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Brian Baldwin".

Brian Baldwin / Assistant Superintendent
City of Saginaw WWTP

DNRE

SEP 08 2010

ENVIRONMENTAL RESOURCE
MANAGEMENT DIVISION

M I C H I G A N

Saginaw

Septage Receiving Plan

June 14, 2010

Introduction – Part 117, Septage Waste Servicers, of the Natural Resources and Environmental Protection Act, 1994 PA 451, regulates the pumping, disposal, and land application of septage. To comply with Part 117, Septage Waste Servicers, of the Natural Resources and Environmental Protection Act 1994 PA 451, a Receiving Facility must develop and Operating Plan for Septage Receiving. A Wastewater Treatment Plant (WWTP) that accepts domestic septage is now defined as a “receiving facility.”

The City of Saginaw - Wastewater Treatment Plant (WWTP) is currently a receiving facility and will continue to be a receiving facility. The WWTP has developed and adopted this Operating Plan for Septage Receiving.

WWTP Location – 2406 Veterans Memorial Pkwy (M13) Saginaw, MI 48601.

Domestic Septage, as defined below is the category of septage that the WWTP will accept for treatment.

Domestic Septage – The septage pumped from home septic tanks, recreation vehicles (RV), portable toilets, or type III marine sanitation devices.

Service Area – Any Licensed hauler whose business address is within the boundaries of Saginaw County, the communities of Lagoon Beach, Auburn, Bay City, Quanicassee, University Center, Freeland, Munger, Lawndale, Dice, Indiantown, Reese, Carrollton, Shattuckville, Shields, Blumfield Corners, Denmark Junction, Gera, Frankentrost, Paines, Swan Creek, Bridgeport, Frankenmuth, Fosters, Clausedale, Garfield, Taymouth, or within a 15 mile radius of the WWTP. The service area will be expanded to encompass a 25 mile radius as of October 1st, 2010. The Saginaw WWTP will accept septic haulers from outside the service area provided they are licensed with the MDNRE and have registered and purchased discharge tickets from The City of Saginaw City Hall.

Hours of Operation – Delivery of all septic waste at the WWTP shall occur Monday – Friday between 7:00 a.m. – 11:20, and 12:00 – 3:00 p.m. (No septic deliveries on Holidays.) Drivers bringing loads before or after these hours will be turned away.

Hydraulic Restrictions – The WWTP will may not accept loads over 4,000 gallons, when plant flows exceed 50 MGD (snow melt or rain event), or more than 60,000 gallons of septage/day Monday – Friday. The running total of gallons discharged at the WWTP for the day is recorded by the Stockroom Clerk. If the 60,000 gallons are received in a day, no additional septage will be accepted unless authorized by the Superintendent, Assistant Superintendent, or Maintenance Supervisor.

Organic Restrictions – The WWTP will exact an organic load surcharge on any septage in excess of the limits stated in the **organic load limits** section. The surcharge shall be 14¢/lb. of BOD₅, 12¢/lb. of Total Suspended Solids, \$1.02/lb. of Total Phosphorus and 41¢/lb. of NH₃-N.

Odor Control – The WWTP is in a secluded area remote from residential, commercial and industrial sites, therefore will not install any odor control system.

Fee Structure, Rate System – The WWTP has no metering device at the receiving location. A septage hauling vehicle will be assumed full to capacity. The charge for septage discharged is based on truck capacity. The fee structure is subject to change, known users will be notified thirty day in advance of any rate change.

Truck Capacity	1 – 1000 gallons	\$30.00
	1001 – 1500 gallons	\$45.00
	1501 – 2000 gallons	\$60.00
	2001 – 2500 gallons	\$75.00
	2501 – 3000 gallons	\$90.00
	3001 – 3500 gallons	\$105.00
	3501 – 4000 gallons	\$120.00
	Over 4000 gallons	\$0.03/ gallon, by arrangement only.

Prepayment – All permitted Septage Haulers will have an account established at the City of Saginaw – Clerk’s Office. Permitted Septage Haulers will purchase discharge tickets from the Treasurers Office. The Septic Hauler will provide all relevant business information and will update information upon request.

Acceptance Procedure – The City utilizes a formal application and permitting process to authorize a Septage Hauling Company to discharge waste at the WWTP. Septage Haulers with a current Septage License from the Michigan Department of Natural Resources and the Environment (MDNRE) are eligible to complete an application for a Saginaw Septage Permit. If all credentials are acceptable a Saginaw Septage Permit will be generated. The Septage Hauler will be scheduled for an orientation at the WWTP Administration Bldg. The Septage Receiving Plan will be made available to all septage haulers.

Unloading Procedure – The licensed Septage Hauler arrives at the WWTP and checks-in at the Shipping & Receiving Office. The Stockroom Clerk oversees the driver’s entry of information onto the Septage Hauler Record Form, whereby the date, time of arrival, truck ID number, gallons to discharge, are recorded. Failure by driver to accurately and completely fill out Septage Hauler Record Form may result in loss of unloading privileges.

The driver obtains an empty sample bottle from the stockroom clerk, labels bottle with name, date, and time, then proceeds to septage unloading area. City personnel may perform an audit, which involves inspecting the septage load during delivery for verification of volume and content of discharge. Verification of Truck Identification Number and Drivers Signature may be required. Discrepancies from volume or any other information provided on Septage Hauler Record Form may result in loss of discharge privileges and or monetary penalties, in accordance with the Sewer Use Ordinance. The driver will unload at septage unloading area. A representative sample is obtained from load approximately halfway through discharge. After completion of discharge, driver hoses off the back of the truck and receiving area as necessary to reduce unsanitary conditions. A full, properly labeled sample bottle is taken to the WWTP laboratory for analysis.

Duty to Comply – The permittee must comply with all conditions of the City of Saginaw’s permit. Failure to comply with the requirements of this permit may be grounds for loss of discharge privileges, administrative action, enforcement proceedings including civil or criminal penalties, injunctive relief, and summary abatements.

Duty to Mitigate – The permittee shall take all reasonable steps to minimize or correct any adverse impact to the treatment plant or the environment resulting from noncompliance with this permit, or any other federal, state, local laws, ordinances, or standards.

Permit Modification and Termination – This permit may be modified or terminated for good cause as determined by the WWTP Superintendent. This modification or termination is final and not subject to appeal.

Property Rights – The issuance of this permit does not convey property rights of any sort, any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any violation of federal, state, or local regulations.

Limitation of Permit Transfer – Permits may be reassigned or transferred to a new owner and/or operator with prior approval of the Saginaw WWTP Superintendent.

- a. The permittee must give at least a 30 day advance notice to the Superintendent
- b. The notice must include a written certification by the new owner which:
 - i. States that the new owner has no intent to change the facility's operation or discharge
 - ii. Identifies the specific date on which the transfer is to occur
 - iii. Acknowledges full responsibility for complying with the existing permit.

Duty to Reapply – If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must submit an application for a new permit at least 90 days before the expiration.

Compliance with Applicable Pretreatment Standards and Requirements – Compliance with this permit does not relieve the permittee from its obligations regarding compliance with any and all applicable federal, state, and local pretreatment standards and requirements including any such standards or requirements that may become effective during the term of this permit.

Inspection and Entry – The permittee shall allow the WWTP personnel, or an authorized representative, upon the presentation of credential to

- a. Enter upon the permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment, including monitoring and control equipment, practices, or operations regulated or required under this permit;
- d. Sample or monitor, for the purpose of assuring permit compliance, any substances or parameters at any location; and

Falsifying Information – Knowingly making any false statement on any report or other document required by this permit or providing a non-representative sample, is a crime and may result in the loss of discharge privileges, imposition of criminal sanctions and/or civil penalties.

Planned Changes – The permittee shall give 30 days notice to the WWTP of any truck modifications, truck volumes, or truck fleet changes which result in new or substantially increased discharges, or if there is a change in the nature of the discharge. The permittee shall give advance notice to the WWTP of any planned changes that may result in noncompliance with permit requirements.

Duty to Provide Information – The permittee shall furnish the WWTP within 10 days any information which the City may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also, upon request, furnish to the City within 10 days copies of any records required to be kept.

Signature Requirements – All applications, reports, or information submitted to the City must contain the following certification statement and be signed by the owner(s) of the septic hauling company.

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.”

Civil and Criminal Liability – The Sewer Use Ordinance provides that any person who violates a permit condition may be subject to civil penalties. The permittee may also be subject to sanctions under federal and/or state law.

Recovery of Costs Incurred – In addition to civil and criminal liability, the permittee violating any of the provisions of this permit or Sewer Use Ordinance or causing damage to or otherwise inhibiting the WWTP shall be liable for any expense, loss, or damage caused by such violation or discharge. The city shall bill the permittee for the costs incurred for any cleaning, repairing, or replacement work caused by the violation or discharge. Refusal to pay the assessed costs shall constitute a separate violation of the Sewer Use Ordinance, and immediate revocation of discharge privileges at the Saginaw WWTP.

Prohibited Discharge Standards

- A. General Prohibitions. No user shall introduce or cause to be introduced into the Publicly owned treatment works (POTW) any pollutant or wastewater which causes pass through, interference, the City to violate its National Pollution Discharge Elimination System (NPDES) permit, or its biosolids management program. These general prohibitions apply to all users of the POTW whether or not they are subject to categorical pretreatment standards or any other federal, state or local pretreatment standards or requirements.
- B. Specific Prohibitions. No user shall introduce or cause to be introduced into the POTW the following pollutants, substances or wastewater:
 1. Pollutants which create a fire or explosion hazard in the POTW, including but not limited to, waste streams with a closed cup flash point of less than 140 degrees Fahrenheit or 60 degrees centigrade using the test methods specified in 40 CFR 261.21.
 2. Wastewater having a pH less than 6.0, or more than 10.5 or otherwise causing corrosive structural damage to the POTW or equipment. The City may enforce a maximum pH of 9.0 for individual users if the Director determines that a discharge with a higher pH may be detrimental to the POTW.
 3. Solid or viscous substances in amounts or of such size which will cause obstruction of the flow in POTW or resulting in interference including any substance detrimental to or determined by the Director to be detrimental to the POTW.
 4. Pollutants, including oxygen-demanding pollutants (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which, either singly or by interaction with other pollutants, will cause interference with the POTW;
 5. Wastewater having a temperature greater than 120 degrees Fahrenheit, or which will inhibit biological activity in the treatment plant resulting in interference, but in no case wastewater which causes the temperature at the head of a treatment plant to exceed 104 degrees Fahrenheit or 40 degrees centigrade;

6. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin, in amounts that will cause interference or pass through;
7. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
8. Trucked or hauled pollutants, except at discharge points designated by the Director in accordance with §51.33;
9. Noxious or malodorous liquids, gases, solids, or other wastewater which, either signally or by interaction with other wastes, are sufficient to create a public nuisance, a hazard to life, or to prevent entry to the POTW for maintenance or repair.
10. Wastewater which imparts color which cannot be removed by the treatment process, such as, but not limited to dye wastes and vegetable tanning solutions, which consequently imparts color to the treatment plant's effluent;
11. Wastewater containing any radioactive wastes or isotopes except in compliance with applicable federal or state regulations;
12. Sludges, screenings, or other residues from the pretreatment of industrial wastes;
13. Medical wastes, except as specifically authorized by the Director in a wastewater discharge permit;
14. Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail toxicity test;
15. Detergents, surface-active agents, or other substances which may cause excessive foaming in the POTW;
16. Fats, oils, or greases of animal or vegetable origin in concentrations greater than 100 mg/l;
17. Collectible floating fats, oils, or greases; including grease trap waste.
18. Garbage that has not been properly shredded;
19. Pollutants which cause a high concentration of inert suspended solids, such as but not limited to, slurries, diatomaceous earth and lime residues;
20. Pollutants which cause high concentration of dissolved solids such as, but not limited to, sodium chloride;
21. Pollutants which exert a COD that would increase operational expense or cause treatment problems;
22. Pollutants which exert high chlorine demand such as, but not limited to, nitrite, cyanide, thiocyanate, sulfite, and thiosulfate;
23. Pollutants which result in water or waste materials containing toxic or poisonous substances that may damage or interfere with any sewage treatment process or that may constitute a hazard to any person, animal, fish, aquatic life, or that may be a hazard in the receiving waters of the state;
24. Any substance which may cause the POTW effluent or any other product of the POTW such as biosolids, residue, sludge or scum, to be unsuitable for reclamation and reuse or to interfere with the biosolids management, reuse or reclamation process where the POTW is pursuing a biosolids, reuse or reclamation program. In no case shall a substance be discharged to the POTW and cause the POTW to be in noncompliance with biosolids use or disposal criteria guidelines or regulations under applicable, federal, state, or local law.

C. Pollutants, substances, or wastewater prohibited by this section shall not be processed or stored in such a manner that they could be discharged to the POTW. ('38 Ge4n'1 Code, Ch. 5, §3-106) (Am. Ord. D-1635, passed 09/09/91, effective 09/09/91; Am. Ord. D-1927, passed 07/15/02, effective 08/01/02.

Organic Load Limits – Since Septage is not conveyed to the WWTP through the sewer system and the waste is generated by non-rate payers with no capital investment in the facility a commodity charge has been established. This charge is based on the non-characteristic nature of septage. For the purpose of this document the following is considered characteristic of septage;

BOD	less than 6,500 mg/l
Total Suspended Solids	less than 13,000 mg/l
Total Phosphorus	less than 200 mg/l
NH3-N	less than 100 mg/l
Fat Oil and Grease	less than 6,000 mg/l

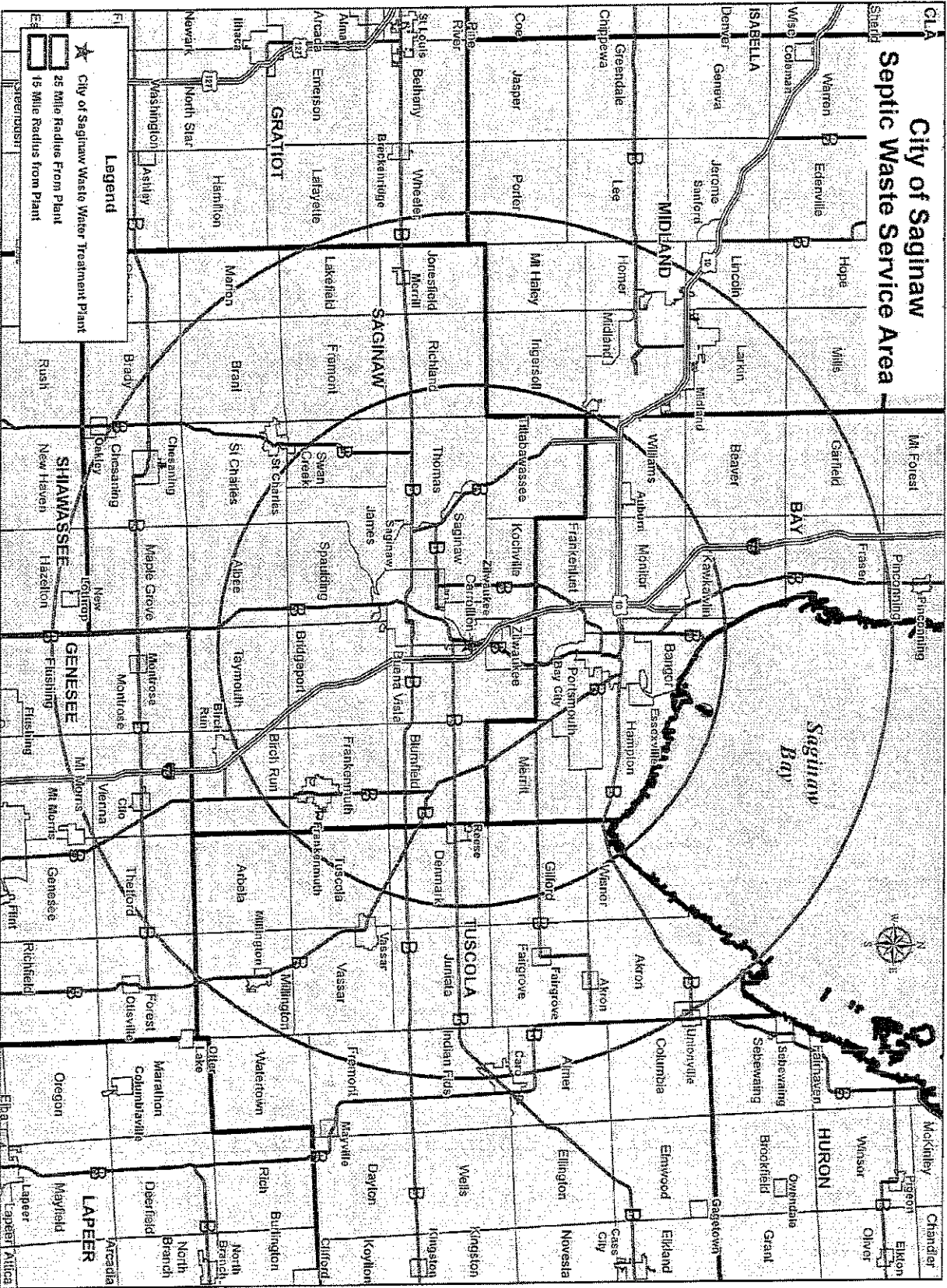
Any sample deemed to be non-characteristic shall be exacted a surcharge. Surcharging will be based upon the following formula.

$$\text{mg/l of sample} - \text{mg/l limit} \times 8.34 \times \text{volume of truck} / 1,000,000 = \text{surchage pounds}$$

A surcharge will be charged for each parameter that is in excess of the limit.

This plan and the septage receiving rate structure are subject to periodic review and revision at the sole discretion of the City of Saginaw. The MDEQ and all permitted septic haulers will be notified in advance of any changes.

City of Saginaw Septic Waste Service Area



Legend

- City of Saginaw Waste Water Treatment Plant
- 25 Mile Radius From Plant
- 15 Mile Radius from Plant

The map displays the following counties and their associated service areas:

- GRATIOT**: Located in the northwestern part of the map, including areas like Lakefield, Fremont, and Brant.
- SAGINAW**: A large central service area covering a significant portion of the map, including areas like Jonesfield, Richland, and Thomas.
- BAY**: Located in the eastern part of the map, including areas like Williams, Auburn, and Monitor.
- SHAWANSEE**: Located in the southwest, including areas like Chesaning and New Haven.
- GENESEE**: Located in the south-central part, including areas like Montrose and Vassar.
- TUSCULA**: Located in the southern part, including areas like Denmark and Vassar.
- LAPEER**: Located in the far south, including areas like Dayton and Mayville.

Other labeled areas include ISABELLA, MIDLAND, and HURON. The map also shows Saginaw Bay and various streets such as Washington, Lincoln, and Grand.

Section 11 – Sanitary Wastewater
D. Non-Domestic Wastewater Information

In July of 2002 the Michigan Department of Environmental Quality approved the Local Limits for the City of Saginaw Wastewater Treatment Plant's Industrial Pretreatment Program. Development of these limits began in 1991-92 and were revised and re-evaluated several times, 1996-97 and 2000-02, before their approval and inclusion in the City's Sewer Use Ordinance. Before the development of the Local Limits could proceed, Maximum Allowable Headworks Loading (MAHL) values were calculated analyzing POTW inhibition values, NPDES permit values, water quality values, sludge disposal values and worker health and safety values.

The allocation of the MAHL capacity was distributed based on forty percent domestic flow, thirty percent inflow/infiltration, and thirty percent non-domestic and other flows. Inflow and infiltration contributions are based on the fact that ninety five percent of the Saginaw sewer system is combined storm water and sanitary water. Design capacities of the POTW, mean annual loadings, are 37,500 pounds per day BOD, and 100,000 pounds per day total suspended solids. At the time of design, phosphorus and nitrogen were not design criteria. Facilities for phosphorus removal were included in the design by providing storage tanks and feed pumps to add metal salts to the activated sludge as it left the aeration tanks. This provided chemical precipitation of phosphorus to occur in the secondary settling tanks.

Current loadings of BOD, Total Suspended Solids, Phosphorus, and Nitrogen are as follows:

	Average Flow	Average pounds/day
Domestic sewage	23.56 MGD	
BOD		18329
TSS		16669
PO4		264
NH3		2245
Non-domestic	3.34 MGD	
BOD		3955
TSS		3927
PO4		197
NH3		242
Septage	0.091 MGD	
BOD		3060
TSS		14745
PO4		129
NH3		212

Total Loading	Average Flow 26.99 MGD	Average pounds/day
	BOD	25344
	TSS	35341
	PO4	590
	NH3	2699

The POTW is currently operating well below its original design capacity.