

# SANITARY SEWER IMPACT REPORT

## TOWN OF GLASTONBURY GLASTONBURY, CONNECTICUT

### WATER POLLUTION CONTROL AUTHORITY STATEMENT OF POLICY

#### SANITARY SEWER IMPACT REPORT

It is the responsibility of the Water Pollution Control Authority (WPCA) to see that an overloaded condition does not occur in the sanitary sewer lines, pumping stations, and treatment plant. Therefore, the WPCA has determined the need to analyze the potential impact on the sanitary sewer system of a proposed development.

It is the purpose of this policy to allow the WPCA to accurately assess the impact produced by a proposed development. Therefore, the WPCA may require the applicant(s) of any proposed development, where the average daily sewage flow to be generated is 3,000 or more gallons per day (including infiltration), to submit a sanitary sewer impact report. If the average daily flow is less than 3,000 gallons per day (including infiltration), the applicant(s) shall submit written confirmation of such flows to the WPCA for review and approval. All flow computations shall be based on the values assigned herein.

In order to assure that all sanitary sewer impact reports are based on similar design criteria, the following values will be assigned:

1. Peak Factor = 2.7
2. Infiltration Rate (if applicable)
  - a. Reinforced Concrete Pipe (RCP)  
 $\frac{\text{Length of Pipe}}{5,280} \times 500 \text{ gal.} \times \text{inch dia.} \times 1 \text{ day} = \text{gal/day}$
  - b. Polyvinylchloride Pipe (PVC)  
 $\frac{\text{Length of Pipe}}{5,280} \times 100 \text{ gal.} \times \text{inch dia.} \times 1 \text{ day} = \text{gal/day}$
3. People Per Unit (based on CRCOG study)
  - a. Single Family Dwelling – 3.8
  - b. Duplex Dwellings – 5.4
  - c. Apartments or Condominiums
    - (1) One Bedroom – 1.6
    - (2) Two Bedroom – 2.7
    - (3) Three Bedroom – 3.2
4. Sanitary Sewage Flows Generated
  - a. 72 gallons per person per day for residential developments (based on actual study)
  - b. \*2,000 gallons per acre per day commercial developments

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c. \*2,000 gallons per acre per day for industrial developments

\*These values may be adjusted by the WPCA depending upon the type of the proposed development.

In addition, the following information must be included in the report:

1. Type of zone
2. Number of acres
3. Number of units
4. Bedrooms per unit
5. If there is a proposal to change the density from the existing underlying zone, a comparison of the flows generated from the proposed density to the existing density should be analyzed to determine the increase or decrease in the flows.
6. Such additional information as the WPCA may require, including updating of any sanitary sewer impact report filed previously.

Excess flow is defined as the anticipated daily flow from the proposed development above that which was provided for the subject parcel in the Town's Master Sewer Plan.

When the flow allotted by the Town's Master Sewer Plan calculation's is exceeded by 50% or more, all excess flow above the allotted amount must be temporarily retained on the subject property utilizing properly sized holding tanks and pumped into the Town sewer system during off-peak time periods as approved by the WPCA. Alternatively, the applicant may petition the WPCA to accept an "Excess Flow Fee" in lieu of this requirement based upon a submitted Engineer's estimate for the installation cost of on-site equipment (i.e. holding tanks, pumps, and timers) as would be required to control the excess flows. This fee would be incorporated into the assessment charges and utilized by the WPCA for maintenance or upgrades to the sanitary sewer conveyance network or treatment plant as may be required.

The average daily excess flow is calculated by the flow difference between average daily flow (gpd) allowed per the Sewer Master Plan minus the calculated average daily flow (gpd). The total calculated difference in average daily excess flow is multiplied by a 1.5 safety factor in order to size the holding tanks.

When submitting a proposed development for review and approval, the following steps should be followed:

1. Preliminary review by the Town Plan and Zoning Commission of basic concept and density change, if any, of the proposed development.
2. Submittal of sanitary sewer impact report by the applicant(s) to the WPCA.
3. WPCA recommendation to the Town Plan and Zoning Commission

## **SANITARY SEWER IMPACT REPORT**

### **F.O.G. (Fats, Oils, and Grease) MANAGEMENT EQUIPMENT**

It is the responsibility of the Water Pollution Control Authority (WPCA) to effectively manage the CTDEEP General Permit for the Discharge of Wastewater Associated with Food Service Establishments utilizing F.O.G. (Fats, Oils, and Grease) Management Equipment outlined within the General Permit. All developments/redevelopments proposing a restaurant use are required to install an outdoor, in-ground passive Grease Trap/FOG Interceptor unit(s) designed to separate fats, oils and grease from wastewater while allowing water to flow through meeting the specifications defined in Section 5(b)(1) of the General Permit, Public Health Code Regulations, and Town of Glastonbury regulations. Outdoor, in-ground passive Grease Trap/FOG Interceptor unit(s) shall be required for restaurants and food service establishments with a design flow of 500 GPD or greater for new and redevelopment projects, along with tenant fit outs to existing commercial space where feasible. The use of an AGRU (Automatic Grease Recovery Unit) will only be allowed for use within small, low grease producing establishments which are being retrofitted to an existing tenant space where installation of an outdoor, in-ground passive Grease Trap/FOG Interceptor is impractical as determined by the WPCA or their authorized agent.

Applicant (s) shall submit outdoor, in-ground passive Grease Trap/FOG Interceptor calculations, based on the worksheet below, for review and approval by the WPCA as part of the submitted Sewer Impact Report.

Waivers of these requirements must be approved by the WPCA Commission on a case by case basis.

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**TOWN OF GLASTONBURY**

**GREASE TRAP/FOG INTERCEPTOR (EXTERIOR) SIZING WORKSHEET:  
MAXIMUM 24-HOUR DAILY FLOW FROM KITCHEN AND CLEAN UP AREA:**

**SIZING CRITERIA:**

**Note: All outdoor grease traps must be located outside the minimum separation distance required by the Connecticut public Health Code and Town of Glastonbury building codes.**

**OUTDOOR GREASE TRAP/FOG INTERCEPTOR:**

(A) Patron-Based Method

Fixed Number of Meals Served Water Usage (1)

<b>Facility</b>	<b>Volume</b>
Schools, per pupil	3 Gallons per pupil (per day)
Residential camps (2), per person	15 Gallons per person (per day)
Hospital, Nursing Home, per bed	15 Gallons per bed (per day)

- (1) Adopted from the Connecticut Public Health Code
- (2) Residential camps: semi-permanent overnight accommodations

**Formula:**

**IV = P x GP**

Where; IV = Interceptor Volume (Outdoor Grease Trap)(Gallons)  
P = Number of patrons per above table (maximum occupancy)  
GP = Gallons used per Patron per day from table above

(B) Patron-Based Method

Varied Number of Meals Served per Day (1)

<b>Facility</b>	<b>Volume</b>
Churches, per person	5 Gallons per meal
Restaurants and Bars	5 Gallon per meal

- (1) Adopted from the Connecticut Public Health Code

**Formula:**

**IV = MS x GM = (S x LF x H/2) x GM**

Where; IV = Interceptor Volume (Outdoor Grease Trap) (Gallons)  
MS = Number of Meals served  
GM = Gallons per Meal from table above  
S = Seating Capacity  
LF = Loading Factor

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- 1.25 meal/seat hour for interstate highways
- 1.00 meal/seat hour for freeways, recreation areas and fixed number of meals
- 0.80 meal/seat hour for main highways
- 0.50 meals/seat hour for other highways and side streets
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H = Hours of Operation

## SANITARY SEWER IMPACT REPORT

### PRIVATE SANITARY SEWAGE PUMP STATION REQUIREMENTS

It is the responsibility of the Water Pollution Control Authority (WPCA) to minimize sanitary sewer overflows due to a power failure. It is the purpose of this policy to allow the WPCA to ensure proper operation and management of the privately owned sanitary sewer pump stations by requiring an emergency backup power source according to the provisions listed below. All requirements listed below shall be depicted on the approved plans. Applicant shall submit final standby generator specifications along with an operation and maintenance plan for approval during the regulatory process.

1. An approved, **permanently installed**, standby generator shall be installed to provide an emergency power connection for all sewage pumps in the event of a power failure.
2. Standby generator shall be properly sized and configured to match the electrical power requirements of the pump motor(s).
3. All sanitary sewage pump station installations shall have an audio/visual alarm at the pump control panel.
4. A remote alarm shall be required to ensure that the pump failure alarm can be heard from the occupied portion of the premises.
5. A contact name of the person responsible for the operation and maintenance of the sewage pump station shall be listed on the approved plans and in the operation and maintenance plan. This information shall also be sent to the Superintendent of Sanitation in the event of a sanitary sewage overflow emergency arises.
6. Pump chambers serving one single family residence shall meet all requirements listed above and as outlined within the Public Improvement Standards Manual except that the back-up power source need not be permanently installed.

**Adopted:** April 1981

**Effective:** April 1981

**Amended:** March 11, 2020

**Effective:** March 11, 2020