

SEWER CAPACITY RESERVATION (SCR) APPLICATION FORM

Applicants shall submit a completed form with all required attachments

I. PROJECT INFORMATION

Project Number (Aqua): _____
(Aqua Project Number Format: 00-111-AAA)

II. WASTEWATER INFORMATION

Service Connections:

Total Number of: _____ Reduced/Removed: _____

Flow information (GPD): *(Provide calculations in attached sewer flow calculation format)*

Design Average: _____ Est. Reduction Avg. Daily: _____

Design Maximum Daily: _____ Est. Reduction Max. Daily: _____

Design Peak Wet Weather: _____ Est. Reduction Peak WW: _____

Grease Trap required? YES NO
If YES, a Grease Trap Permit shall be submitted for each proposed unit.

Oil Water Separator required? YES NO
If YES, an Oil Water Separator Permit shall be submitted for each proposed unit.

Wastewater Pumping Stations required? YES NO

General Description of proposed New Facilities: _____

Attach any available schematic maps, construction drawings, and construction schedule or summary of anticipated schedule

Location of new service connections *(Identify location of proposed connection)*: _____

Required upgrades to existing wastewater system (if known): _____

(Please refer to the City and County of Honolulu Design Standards of the Department of Wastewater Management Volumes 1 and 2 for additional submittal requirements)

Project Planning Report Attached? YES NO
If NO, please provide explanation: _____

Project Basis of Design Report Attached? YES NO
If NO, please provide explanation: _____

III. CONDITIONS OF RESERVATION

1. The Applicant shall ensure compliance with the requirements of the "Manual for Army Project Services Related to Wastewater."
2. The design of this project shall comply with the Aqua Engineers "Collection System Design and Construction Protocol," the City and County of Honolulu's Wastewater Design Standards Volumes 1 (1993), and all applicable engineering/building/plumbing code standards.
3. During the Design Phase of the project, the Applicant shall submit the following for Aqua review and all comments should be addressed:
 - i. Project Plans and Specifications
 - ii. Any updated wastewater quantity information, as described in Section II of this form.
4. Prior to the commencement of Construction, the Applicant shall submit a Sewer Connection Permit (SCP) and any other applicable forms for Aqua review and approval.
5. By signing below, the Applicant agrees to all the above conditions, acknowledges that Aqua Engineers has not made any representations or warranties of any kind regarding the existing collection system, including the physical condition, and is accepting the system on an "as is" basis.

Signature

Title

Print Name

Date

FOR AQUA ENGINEERS USE ONLY

SCR No.: _____

(Format: 00-111-AAA-B-CCCC-222)

SCR Approved? YES NO

Comments:

Signature

Title

Print Name

Date

SEWER FLOW CALCULATIONS

Design Flow Calculations

Sewer systems shall be designed based on an Average Daily per Capita Flow based on the following references:

1. Design Standards of the Department of Wastewater Management, Volume 1, CCH (July 1993)
2. US Army Technical Instructions Wastewater Collection, TI 814-10 (August 1998)
3. Unified Facilities Criteria, UFC 3-240-01 (Change 1, 1 November 2014)

For non-residential or short term/temporary buildings (office, plants, etc.), assume 8-hour shift per day, use Average Daily per Capita Flow = 30 GPCD (Gallons per Capita per Day). For residential/permanent buildings, use Average Daily per Capita Flow = 80 GPCD.

Flow Calculation Process

Example Calculation for Non-Residential Building (with Expected Population of 20 Persons)

1) Average Daily Flow (Qa)

$$Qa = [\text{Average Daily per Capita Flow}] \times [\text{Population}]$$

Example: $Qa = 30 \text{ GPCD} \times 20 \text{ PN}$

$$Qa = \underline{600 \text{ GPD}}$$

2) Maximum Wastewater Flow (Qm)

$$Qm = Qa \times [\text{Flow Factor from CCH Wastewater Design Standards 1993, Figure 22.2.4; pg. 30}]$$

Example: $Qm = Qa \times [5]$

$$Qm = 600 \text{ GPD} \times 5$$

$$Qm = \underline{3,000 \text{ GPD}}$$

3) Dry Weather Infiltration/Inflow (I/I Dry)

$$I/I \text{ Dry} = [I/I \text{ Dry Rate}] \times [\text{Population}]$$

Example: $I/I \text{ Dry} = 5 \text{ GPCD} \times 20 \text{ PN}$

$$I/I \text{ Dry} = \underline{100 \text{ GPD}}$$

Note: For I/I Dry Rate, use 5 GPCD for sewers laid above ground water table, if below use 35 GPCD.

4) Design Average Flow (Qda)

$$Qda = Qa + I/I \text{ Dry}$$

Example: $Qda = 600 \text{ GPD} + 100 \text{ GPD}$

$$Qda = \underline{700 \text{ GPD}}$$

5) Design Maximum Flow (Qdm)

$$Qdm = Qm + I/I \text{ Dry}$$

Example: $Qdm = 3,000 \text{ GPD} + 100 \text{ GPD}$

$$Qdm = \underline{3,100 \text{ GPD}}$$

6) Wet Weather Infiltration/Inflow (I/I Wet)

$$I/I \text{ Wet} = [I/I \text{ Wet Rate}] \times [\text{Acreage}]$$

Example: $I/I \text{ Wet} = 1,250 \text{ GAD} \times 0.5 \text{ Acres}$

$$I/I \text{ Wet} = \underline{625 \text{ GPD}}$$

Note: For I/I Wet Rate, use 1,250 GAD (Gallon per Acre per Day) for sewers laid above normal ground water table, if below use 2,750 GAD.

7) Design Peak Flow (Qp)

$$Qp = Qdm + I/I \text{ wet}$$

Example: $Qp = 3,100 \text{ GPD} + 625 \text{ GPD}$

$$Qp = \underline{3,725 \text{ GPD}}$$