## CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Department of Public Services, Mr. Frank J. Brancely, 55 Portland Street. Senior Engineering Technician, Portland, Maine 04101-2991 Phone #: (207) 874-8832, Fax #: (207) 874-8852, Date: 9-11-15 E-mail:fjb@portlandmaine.gov 1. Please, Submit Utility, Site, and Locus Plans. 415 Cumberland Ave, Portland ME 04101 Site Address: Chart Block Lot Number: 036 - G033 Proposed Use: Multi Family Housing **Previous Use:** Commercial (see part 4 below) Office 349 Industrial (complete part 5 below) **Existing Sanitary Flows: GPD Existing Process Flows:** N/A **GPD** Governmental Residential Description and location of City sewer that is to receive Other (specify) the proposed building sewer lateral. (Clearly, indicate the proposed connections, on the submitted plans) 2. Please, Submit Contact Information. City Planner's Name: Phone: \_ Owner/Developer Name: Patrick Ducas Owner/Developer Address: 17 Chestnut Street, Portland ME 04101 Fax: E-mail: patrickd@ducasconstruction.com Phone: 207-536-0838 Engineering Consultant Name: N/A Engineering Consultant Address: N/A Fax:\_\_\_\_ E-mail: Phone: (Note: Consultants and Developers should allow +/- 15 days, for capacity status, prior to Planning Board Review) 3. Please, Submit Domestic Wastewater Design Flow Calculations. 1,440 **GPD** Estimated Domestic Wastewater Flow Generated: Peaking Factor/ Peak Times: Specify the source of design guidelines: (i.e.\_"Handbook of Subsurface Wastewater Disposal in Maine," \_ "Plumbers and Pipe Fitters Calculation Manual," \_\_ Portland Water District Records, \_\_ Other (specify)

(Note: Please submit calculations showing the derivation of your design flows, either on the following page, in the space provided, or attached, as a separate sheet)

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4. Please, Submit External Grease Interceptor Calculations.				
Total Drainage Fixture Unit (DFU) Values:	N/A			
Size of External Grease Interceptor:				
Retention Time:				
Peaking Factor/ Peak Times:				
(Note: In determining your restaurant process water flows, and the size of your ecode. Note: In determining the retention time, sixty (60) minutes is the minimus showing the derivation of your restaurant process water design flows, and please size of your external grease interceptor, either in the space provides.	ım retention time. Note: Ple se submit detailed calculatio	ase submit de ons showing th	tailed calculations ne derivation of the	
5. Please, Submit Industrial Process Wastewater Flow Calculation	ıs			
Estimated Industrial Process Wastewater Flows Generated:	N/A		GPD	
Do you currently hold Federal or State discharge permits?		Yes	No	
Is the process wastewater termed categorical under CFR 40?		Yes	No	
OSHA Standard Industrial Code (SIC):	http://www.os	http://www.osha.gov/oshstats/sicser.html		
Peaking Factor/Peak Process Times:				
(Note: On the submitted plans, please show where the building's domestic so commercial process wastewater sewer laterals exits the facility. Also, show to Finally, show the location of the wet wells, control manholes, or other access possible.  (Note: Please submit detailed calculations showing the either in the space provided below, or attack.)	where these building sewer I oints; and, the locations of f he derivation of your design	laterals enter i ilters, strainer	the city's sewer.	
Notes. Comments or Calculation				

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long periods of time. As such, these design flows anticipate variations in flow among different establishments of the same class as well as flow variations over time in the same establishment. These design flows also assume wastewater with strengths typical of the class of establishment.

3. Design flow: Each component of the system must be designed and installed to adequately treat and dispose of the amount of wastewater expected to be discharged from the premises to be served. Design flows for private residences are prescribed in Section 4(E) and Table 4A. Design flows for commercial or institutional establishments are prescribed in Section 4(F) and Table 4C.

## E. DESIGN FLOWS FOR DWELLING UNITS

1. Single-family dwelling units: The design flows for single-family dwelling units including in-law apartments, connected to subsurface wastewater disposal systems is calculated, based on Table 4A.

TABLE 4A
DESIGN FLOWS FOR SINGLE FAMILY DWELLING UNITS

Bedrooms	GPD per dwelling unit	
2 or less	180	
3	270	
4	360	
5	450	
6	540	
Each additional bedroom	90 per bedroom	
In-law apartment	120	
Primitive disposal field	25	
Limited disposal field	100	
Bunkhouse	20 per bed	

(6) 1 Beds x 120gpd = 720 GPD(4) 2 beds x 90gpd = 720 GPDTotal projected GDP = 1,440.00 GPD

2. Multiple family dwelling units: The design flow for multiple family dwelling units is calculated at 120 gallons per day per unit for 1-bedroom units, and 90 gallons per day per bedroom for multiple bedroom units.

## F. DESIGN FLOWS FOR OTHER FACILITIES

- 1. General: The design flow must be the maximum flow that may reasonably be expected to be discharged from a residential, commercial, or institutional facility on any day of operation. It must be expressed in gallons per day. The design flow must not be considered as an average daily flow. It incorporates a factor of safety over the average flows to accommodate peak wastewater flows or facilities that discharge greater than the average flows of wastewater either occasionally or on a regular basis. The design flow is calculated as follows:
- 2. Base flow: To determine base design flow, multiply the design flow per unit/user from the value in Table 4C by the number of units or users.
- 3. Employee contribution: When employees will be present at the establishment, estimate the maximum number of employees who may be present during a single day of operation. Then multiply the number of employees by the design flow per employee.
- 4. Design flows: The values listed in Table 4C are minimum requirements for average facilities in the categories listed and the total design flow is the result of the summation of base flow in Section 4(F)(2) and Employee Contribution in Section 4(F)(3). Where actual water use data is available relating to the facility, the Department may approve the use of an alternative design flow. In such a case, the value used for the design flow must meet the requirements in Section 4(G).
- 5. Non-standard design flows: Design flows which are not based upon Table 4A or Table 4C, or upon water use records, require prior review and approval from the Department.

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