



DEPARTMENT OF WATERSHED MANAGEMENT - PROGRAM MANAGEMENT TEAM
230 Peachtree Street, Suite 500, Atlanta, Georgia 30303 Telephone: 404.979.6999
Facsimile: 5th Floor – 404.979.3131

GUIDELINES FOR APPLYING FOR SEWER CAPACITY CERTIFICATION

WHAT IS SEWER CAPACITY CERTIFICATION?

Sewer Capacity Certification is a process where every new development which will require connection of its sanitary sewer service to the City of Atlanta's sewer system is reviewed to determine whether or not there is adequate capacity in the sewer system to convey the new sewage flow from the proposed development to the water reclamation center (WRC).

WHO SHOULD APPLY?

Everyone proposing a new development within the city limits of Atlanta whose development will be served by the City of Atlanta's sanitary sewer system should apply. There are certain developments that do not require capacity certification. Sewer capacity certification analysts from the City of Atlanta's Department of Watershed Management will determine whether or not your proposed development needs sewer capacity certification when you apply.

DOES IT COST MONEY TO APPLY?

A Capacity Certification Fee is required per the City of Atlanta Ordinance 04-O-1873.

- The flat rate for single family residential and commercial flows less than 2,500 gallons per day (**GPD**) is \$600.
- The flat rate for commercial permits for flows of 2,500 gpd or greater is \$1,500. Additional fees for permits in capacity limited basins, requiring Capacity Certification analyses may apply as follows:
 - Flat rate for simple analysis of possible capacity options (upon request of applicant) is \$2,245.
 - Additional actual charges for modeling, site visits, and Alternative analysis (actual fee will vary depending upon services required or requested)

WHERE WILL I GET MORE INFORMATION?

For more information on sewer capacity certification contact Mr. Dennis Morris, Department of Watershed Management at (404) 330-6249.

HOW DO I DETERMINE SEWAGE FLOWRATE FROM MY PROPOSED DEVELOPMENT?

The City of Atlanta's Standard Sewage Flowrates- **Table 1** is attached for determining the sewage flowrate from your proposed development.

If the total sewage flowrate from your proposed development is less than 2,500 gallons per day (**GPD**), your sewer capacity certification application will be accepted and processed.

If the total sewage flowrate from your proposed development is 2,500 **GPD** or higher, a hydraulic analysis report by a state of Georgia licensed Professional Engineer will be required prior to processing of the sewer capacity certification application.

Please refer to the Hydraulic Analysis Process section of this guideline.

HYDRAULIC ANALYSIS PROCESS

1. PROPOSED DEVELOPMENTS IN SEPARATE SANITARY SEWER BASINS

I. ESTIMATE NEW SEWAGE FLOWRATE AND DESIGN NEW SEWER LINE

- (a) Determine the total sewage flowrate from the proposed development using the City of Atlanta's Standard Sewage Flowrate, **Table 1** attached.
- (b) Multiply the total sewage flowrate in item (a) by a peaking factor of 4.0 per City of Atlanta Code of Ordinance.
- (c) Use the peak sewage flowrate in item (b) to design the sanitary sewer from the proposed development to an existing City of Atlanta sanitary sewer manhole.

II. EVALUATE IMPACT ON EXISTING SEWER LATERALS

- (a) From the existing manhole for the proposed connection to the nearest major sewer trunk, obtain existing pipe size, pipe material, flow depth and slope of all the pipes. (See **Appendix A**)
- (b) Convert the measured flow depth to flowrate in gallons per day (GPD) and multiply by a peaking factor of 4.0.
- (c) Add the peak sewage flowrate in I. (c) to the peak flowrate in II. (b). The result is the total flowrate that the existing sewer must have the capacity to convey from point of connection to the nearest major sewer trunk without surcharging.
- (d) If the existing sewer does not have adequate capacity to convey this flowrate, the existing sewer must be replaced by the developer with a new sewer with adequate capacity. The new sewer will be designed with a peaking factor of 4.0 and a 50-year build-out of service area.

2. PROPOSED DEVELOPMENTS IN COMBINED SEWER BASINS

I. ESTIMATE NEW SEWAGE FLOWRATE AND DESIGN NEW SEWER LINE

- (a) Determine the total sewage flowrate from the proposed development using the City of Atlanta's Standard Sewage Flowrate **Table 1** attached.
- (b) Multiply the total sewage flowrate in item (a) by a peaking factor of 4.0.

- (c) Use the peak sewage flowrate in item (b) to design the sanitary sewer from the proposed development to an existing City of Atlanta sanitary sewer manhole.
- (d) Perform a hydrology study of the project site being developed and identify the pre-development stormwater runoff rates for all storm frequencies---2, 5,10,25,50 and 100-year storms.
- (e) Calculate 70% of the peak flowrates from each of the storms in item (d) above. These are the allowable stormwater discharge rates from the development per City Ordinance.
- (f) Convert the peak sewage flowrate in item (b) above from gallons per day (GPD) to cubic foot per second (CFS).
- (g) Subtract item (f) from the peak flow rate of each storm frequency in item (e) above. The result is the allowable discharge from the detention pond.

Note:

Site Development Section of the Department of Watershed Management reviews hydrology reports along with site development plans. All hydrology reports should be submitted to Site Development. All sewer studies when **requested in writing** by the PMT, should be submitted to Dennis Morris of the Department of Watershed Management or to Cletus Onyeka of Cleanwater Atlanta, PMT.



DEPARTMENT OF WATERSHED MANAGEMENT - PROGRAM MANAGEMENT TEAM
 230 Peachtree Street, Suite 500, Atlanta, Georgia 30303 Telephone: 404.979.6999
 Facsimile: 5th Floor – 404.979.3131

APPENDIX A

Guidelines for Measuring Average Hourly Sanitary Sewer Flowrates in Existing Sewers

Flow Measurement Periods:

Commercial/Industrial Areas: 9:00 am – 3:00 pm Monday through Friday

Residential Areas: 5:00 am – 7:00 am Monday through Friday

or

6:00 pm – 9:00 pm Monday through Friday

** Measurements must be taken over a period of not less than sixty (60) minutes!
 Measurements must be taken at manholes downstream of all proposed new connections for the development.*

Obtain Pipe Data From Point Of Connection To The Nearest Major Trunk:

Pipe size, pipe material, pipe slope

Example of Flow Measurements:

Type of Development: Predominantly Residential Area

Manhole Location: Nearest street address and detailed description or attach a site plan

<u>Date</u>	<u>Time</u>	<u>Flow Depth</u>
10-22-03	6:15 pm	4.5"
10-22-03	6:30 pm	6.0"
10-22-03	6:45 pm	7.5"
10-22-03	7:00 pm	7.0"
10-22-03	7:15 pm	6.5"
10-22-03	7:30 pm	6.0"

From this example, a flow depth of 6.25" will be used to calculate the peak hourly dry-weather flowrate.

For more information please call Cletus N. Onyeka, P.E. at the PMT at the above telephone number.

**City of Atlanta
Short-Term Capacity Certification Program
Standard Sewage Flowrates Table 1**

TYPE OF STRUCTURE	BASE FLOWRATE (GPD)	UNIT	FLOWRATE, GPD PER SQUARE FT.	BASIS FOR CONVERSION
Amusement/Recreation/Arcade			0.200	
Bar, Tavern	50	per seat	1.650	60% seated area, 20 sq. ft. per seat
Barber Shop/Beauty Salon	333	per chair	2.000	40 sq. ft. per chair
Caterer			1.000	assigned value
Church (not including food service or day schools)	5	per seat	0.125	50% seated area, 20 sq. ft. per seat
Coin Laundries	400	per machine		
Commercial Laundries	640	per machine		
Commercial/Mercantile Building	75	per 1000 sq. ft.	0.075	
Country Club	100	per resident member		
	25	per non-resident member		
Hospitals	200	per bed		
Industrial/Warehouse (not including food service)	25	per employee		
Nursing Home	125	per bed		
Motel/Hotel	100	per room		
Offices (not including food service)	175	per 1000 sq. ft.	0.175	
Police/Fire Station (w/ food service)	75	per resident employee		
	25	per non-resident employee		
Residence, single family	240	per house		
Residence, multiple family (including apartments)	240	per unit		
Restaurant/Coffee Shop/Fast Food	55	per seat	1.650	60% seated area, 20 sq. ft. per seat
School - (w/ cafeteria)	12	per student	0.200	65% seated area, 40 sq. ft. per seat
- (w/ cafeteria, gym)	15	per student	0.250	65% seated area, 40 sq. ft. per seat
- (w/ cafeteria, gym, food service)	25	per student	0.400	65% seated area, 40 sq. ft. per seat
Service Station	10	per car	0.100	
Shopping Center (not including food service)	100	per 1000 sq.ft.	0.100	
Theater	5	per seat	0.125	50% seated area, 20 sq. ft. per seat

Information Resources: 1). Suggested Design & Construction Criteria, Package Wastewater Treatment Facilities; State of Georgia, Department of Natural Resources, Environmental Protection Division, 1973. 2). Wastewater Engineering: Treatment, Disposal, and Reuse; Metcalf & Eddy, 1991. 3). Preliminary data assembled by Montgomery Watson

Modified by Technical Services Division, August 2, 1999.
*Revised to be consistent with Fire Department standards, January 10 , 2005