



Flow Tracking for Sewer Extension Applications
 (FTSE 10-23)

Entity Requesting Allocation: _____

Project Name for which flow is being requested: _____

More than one FTSE may be required for a single project if the owner of the WWTP is not responsible for all pump stations along the route of the proposed wastewater flow.

I. Complete this section only if you are the owner of the wastewater treatment plant.

a. WWTP Facility Name: _____

b. WWTP Facility Permit #: _____

All flows are in MGD

c. WWTP facility's permitted flow _____

d. Estimated obligated flow not yet tributary to the WWTP _____

e. WWTP facility's actual avg. flow _____

f. Total flow for this specific request _____

g. Total actual and obligated flows to the facility _____

h. Percent of permitted flow used _____

II. Complete this section for each pump station you are responsible for along the route of this proposed wastewater flow.

List pump stations located between the project connection point and the WWTP:

			(A) Design Average Daily Flow** (Firm / pf), MGD	(B) Approx. Current Avg. Daily Flow, MGD	(C) Obligated, Not Yet Tributary Daily Flow, MGD	(D)=(B+C) Total Current Flow Plus Obligated Flow	(E)=(A-D) Available Capacity***
Pump Station (Name or Number)	Pump Station Permit No.	Firm Capacity, * MGD					
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

* The Firm Capacity (design flow) of any pump station is defined as the maximum pumped flow that can be achieved with the largest pump taken out of service.

** Design Average Daily Flow is the firm capacity of the pump station divided by a peaking factor (pf) not less than 2.5, per Section 2.02(A)(4)(c) of the Minimum Design Criteria.

*** A Planning Assessment Addendum shall be attached for each pump station located _____ between the project connection point and the WWTP where the Available Capacity is ≤ 0 .

Downstream Facility Name (Sewer): _____

Downstream Permit Number: _____

III. Certification Statement:

I _____ certify to the best of my knowledge that the addition of the volume of wastewater to be permitted in this project has been evaluated along the route to the receiving wastewater treatment facility and that the flow from this project is not anticipated to cause any capacity related sanitary sewer overflows or overburden any downstream pump station en route to the receiving treatment plant under normal circumstances, given the implementation of the planned improvements identified in the planning assessment where applicable. This analysis has been performed in accordance with local established policies and procedures using the best available data. This certification applies to those items listed above in Sections I and II plus all attached planning assessment addendums for which I am the responsible party. Signature of this form certifies that the receiving collection system or treatment works has adequate capacity to transport and treat the proposed new wastewater.

Signing Official Signature

Date

Title of Signing Official

WASTEWATER TREATMENT SYSTEM EXPANSIONS BEYOND EXISTING ALLOCATION

Complete this form and submit applicable supporting documentation if the proposed project is subject to overallocation allowances outlined per G.S. 143-215.1(f5).

Receiving WWTP Name:

Receiving WWTP Permit Number:

Provide a copy of the active NPDES permit for the receiving WWTP.

Overallocation Criteria

1. Does the receiving WWTP's existing NPDES permit have an expansion flow tier? Yes or No.
 - a. If yes, provide the expansion flow tier: ____ MGD; proceed to item 2.
 - b. If no, overallocation is not allowable for this construction until such a time that the receiving WWTP's NPDES permit is modified for inclusion of an expansion flow tier capable of receiving and sufficiently treating the wastewater generated by the proposed construction.
2. Is the receiving WWTP and collection system located within either (1) a county with a projected population growth rate above two percent annually based on a 20-year residential growth projection conducted using data provided by the Office of State Budget and Management (OSBM) State Demographer or (2) one of the top 20% of the fastest growing counties in the State by population based on a 10-year residential growth projection conducted using data provided by the OSBM State Demographer? Yes or No.
 - a. If yes, submit a residential population projection to support your claim; proceed to item 3.
 - b. If no, overallocation is not allowable for this construction.
3. Has the receiving WWTP received a violation for being non-compliant with any non-flow limitations identified in the active NPDES permit in the past 5 years? Yes or No.
 - a. If yes, overallocation is not allowable for this construction.
 - b. If no, submit a limit violation report to support your claim; proceed to item 4.
4. Has the receiving WWTP exceeded its monthly average flow limitation identified in the active NPDES permit more than once in any 12-month period in the past 10 years? Yes or No.
 - a. If yes, overallocation is not allowable for this construction. The receiving WWTP may not allocate more than one hundred percent (100%) of the existing system's hydraulic capacity until the permittee complies with the permitted monthly flow for at least 12 consecutive months.
 - b. If no, submit a WWTP flow report to support your claim; proceed to item 5.
5. Is completion of construction for work identified in an Authorization to Construct (ATC) permit that results in expansion of facility to the next flow tier anticipated to occur within 24 months of the submittal date? Yes or No.
 - a. If yes, allocation of one hundred ten percent (115%) of the receiving WWTP's existing hydraulic capacity is allowable.
 - i. Provide the ATC Permit Number: ____;
 - ii. Submit a construction timeline signed by the contactor's Project Manager;
 - iii. Submit a letter of agreement of timeline feasibility signed by the NC-licensed Professional Engineer responsible for the certification of work covered under the applicable ATC permit;
 - iv. Proceed to item 6.
 - b. If no, allocation of one hundred ten percent (110%) of the receiving WWTP's existing hydraulic capacity is allowable. Proceed to item 6.

6. Does the overallocation identified as allowable under item 5 result in a WWTP flow rate greater than the permitted projected capacity after expansion? Yes or No.
- a. If yes, overallocation is not allowable for this construction.
 - b. If no, proceed to item 7.
7. Does the overallocation identified as allowable under item 5 result in a WWTP flow rate greater than 80% of the permitted projected capacity after expansion? Yes or No.
- a. If yes, overallocation is allowable. Submit an engineering evaluation of the receiving WWTP's future wastewater treatment, utilization, and disposal needs. This evaluation shall outline plans for meeting future wastewater treatment, utilization, or disposal needs by either expansion of the existing system, elimination or reduction of extraneous flows, or water conservation and shall include the source of funding for the improvements. If expansion is not proposed or is proposed for a later date, a justification shall be made that wastewater treatment needs will be met based on past growth records and future growth projections and, as appropriate, shall include conservation plans or other measures to achieve waste flow reductions. This shall be provided to the Division prior to the proposed activity. Proceed to item 8.
 - b. If no, overallocation is allowable.
8. Does the overallocation identified as allowable under item 5 result in a WWTP flow rate greater than 90% of the permitted projected capacity after expansion? Yes or No.
- a. If yes, overallocation is allowable. However, the permittee for the receiving WWTP shall obtain all permits needed for the expansion of the wastewater treatment, utilization, or disposal system and, if construction is needed, submit final plans and specifications for expansion, including a construction schedule. If expansion is not proposed or is proposed for a later date, a justification shall be made that wastewater treatment needs will be met based on past growth records and future growth projections and, as appropriate, shall include conservation plans or other specific measures to achieve waste flow reductions. This shall be provided to the Division prior to the proposed activity.
 - b. If no, overallocation is allowable.

Signing Official Signature

Date

Instructions for Flow Tracking form (FTSE) and Planning Assessment Addendum (PAA)

Section I

- a. WWTP Facility Name: Enter the name of the WWTP that will receive the wastewater flow.
- b. WWTP Facility Permit #: Enter the NPDES or Non-Discharge number for the WWTP receiving the wastewater flow.
- c. WWTP facility's permitted flow, MGD: From WWTP owner's NPDES or Non-Discharge permit.
- d. Estimated obligated flow not yet tributary to the WWTP, MGD: This includes flows allocated to other construction projects not yet contributing flow to the collection system. Flows allocated through interlocal agreements or other contracts not yet contributing flow to the collection system are also included. For POTWs that implement a pretreatment program, include flows allocated to industrial users who may not be using all of their flow allocation. Please contact your Pretreatment Coordinator for information on industrial flow tributary to your WWTP.

As of January 15, 2008 the POTW should have reviewed flow allocations made over the last two years and reconciled their flow records, to the best of their ability, so it is known how much flow has been obligated and is not yet been made tributary to the WWTP, in accordance with local policies and procedures employed by the reporting entity.

- e. WWTP facility's actual avg. flow, MGD: Previous 12 month average.
- f. Total flow for this specific request, MGD: Enter the requested flow volume.
- g. Total actual and obligated flows to the facility, MGD Equals [d + e + f]
- h. Percent of permitted flow used: Equals $[(g / c) * 100]$

For example:

On January 15 a POTW with a permitted flow of 6.0 MGD, reported to the Regional Office that there is 0.5 MGD of flow that is obligated but not yet tributary. The annual average flow for 2007 is 2.7 MGD. There is a proposed flow expansion of 0.015 MGD.

The first Form FTSE submitted after January 15, 2008 may have numbers like this:

- c. = 6.0 MGD
- d. = 0.5 MGD
- e. = 2.7 MGD
- f. = 0.015 MGD
- g. = 3.215 MGD
- h. = 53.6 %

The next Form FTSE may be updated like this with a proposed flow expansion of 0.102 MGD:

- c. = 6.0 MGD
- d. = 0.515 MGD
- e. = 2.73 MGD
- f. = 0.102 MGD
- g. = 3.349 MGD
- h. = 55.8 %

Each subsequent FTSE form will be updated in the same manner.

Section II

List the pump station name or number and approximate pump station firm capacity, approximate design average daily flow (A) approximate current average daily flow (B), and the obligated, not yet tributary flow through the pump station (C) for each pump station that will be impacted by the proposed sewer extension project. Calculate the total current flow plus obligated flow (D=B+C) and the available capacity (E=A-D). Include the proposed flow for this project with other obligated flows that have been approved for the pump station but are not yet tributary (C).

Firm capacity is the maximum pumped flow that can be achieved with the largest pump out of service as per the Minimum Design Criteria.

Design Average Daily Flow is the firm capacity of the pump station divided by a peaking factor (pf) of not less than 2.5.

If the available capacity (E) for any pump station is ≤ 0 , then prepare a planning assessment for that pump station if the system has future specific plans related to capacity that should be considered in the permitting process.

	(A)	(B)	(C)	(D)=(B+C)	(E)=(A-D)	
Pump Station (Name or Number)	Firm Capacity MGD	Design Average Daily Flow (Firm / pf)	Approx. Current Avg. Daily Flow, MGD	Obligated, Not Yet Tributary Daily Flow, MGD	Total Current Flow Plus Obligated Flow	Available Capacity*
Kaw Creek PS	0.800	0.320	0.252	0.080	0.332	-0.012
Valley Road PS	1.895	0.758	0.472	0.135	0.607	0.151

Planning Assessment Addendum Instructions

Submit a planning assessment addendum for each pump station listed in Section II where available capacity is ≤ 0 .

A planning assessment for Kaw Creek PS (see example data above) may be performed to evaluate whether there is significant likelihood that needed improvements or reductions in obligated flows will be in place prior to activating the flows from the proposed sewer extension project.

If the system decides to accept the flow based on a planning assessment addendum, it is responsible to manage the flow without capacity related sanitary overflows and must take all steps necessary to complete the project or control the rate of flow to prevent sanitary sewer overflows.

The planning assessment may identify a funded project currently in design or construction, or a planned project in the future not yet funded but in a formal plan adopted by the system. The system should carefully weigh the certainty of successful timely project completion for any expansion, flow management diversion or infiltration and inflow elimination projects that are the foundation of a planned solution to capacity tracking and acceptance compliance.

For example:

Given that:

- a. The proportion and amount of obligated, not yet tributary flow accounts for 24 % and 0.080 MGD of the committed flow in Pump Station Kaw Creek; and that
- b. The rate of activation of this obligated, not yet tributary capacity is currently approximately 0.01 MGD per year; and that
- c. A funded capital project that will provide the required planned capacity, namely _____ is in design or under construction with planned completion in _____; and/or
- d. The following applies:

The master plan and ten year capital plan contain recommended scope and funding for a capital project entitled Kaw Creek Pump Station upgrade with funding planned in July 2014. This project is planned to add 0.100 MGD to the firm capacity of the pump station by October 2015. Inclusion of this proposed capital project as a condition of this Flow Tracking/Acceptance for Sewer Extension Permit Application elevates this project's priority for funding and construction to be implemented ahead of the activation of obligated, not yet tributary flows in amounts that exceed the firm pump station capacities identified in Section II above.

Therefore:

Given reasonably expected conditions and planning information, there is sufficient justification to allow this flow to be permitted, without a significant likelihood of over-allocating capacity in the system infrastructure.