

STANDARD PROCEDURES OF THE WASHINGTON SUBURBAN SANITARY COMMISSION

ORIGINATOR & POSITION Gary Gumm Engineering & Construction Team Chief	SP NUMBER REG-IFSM- EC-2016-007 SUPERSEDES ENG 11-01	APPROVE BY/DATE COMMISSION September 21, 2016	EFFECTIVE DATE November 1, 2016	RECURRING REVIEW PERIOD: 3 yrs.	PAGE 1 OF 4
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SUBJECT: USE OF THE WSSC SEWER MODEL IN CONJUNCTION WITH PHASE 1 HYDRAULIC PLANNING ANALYSES

Definitions*

Base sanitary flow – Proposed sanitary flow generated from new or re-development as determined using base sanitary flow factors listed in the WSSC Pipeline Design Manual.

CIP Sized Sewer Lines – Gravity sewers with an inside diameter 15-inches or greater.

Overflow – Wastewater exiting the top of any structure in the wastewater collection system (including manholes, vaults, wetwells and other facilities) and flowing out of the structure onto the ground surface or into a water body. This definition does not take into consideration structures with welded or sealed lids.

Projected Overflow – Overflow predicted by the WSSC Sewer Model.

Projected Future Base Sanitary Flow – Flow projections based on the latest demographic projections as published by the Metropolitan Washington Council of Governments.

Release for Service: The date ownership of the improvement transfers from the Applicant/Owner/Developer to WSSC. Upon issuance of the Release for Service, the Applicant agrees that title to the water and/or sewer system and appurtenances transfers to WSSC and WSSC shall assume ownership, maintenance and operation responsibility for the water and/or sewer system and appurtenances within the bounds of the easement conveyed to WSSC and in the public right of way.

Safe Pumping Capacity – The measured flowrate that a wastewater pumping station is capable of pumping with the largest pump out of service based on the latest published Pump Station Capacity Evaluation as required by the Consent Decree, Civil Action No. PJM 04-03679, Messite, 2005. Safe pumping capacity shall be the basis utilized when evaluating pump station capacity.

Start of Construction – The date upon which all of the following have been completed by the Applicant, as determined by WSSC: Design Plans approved by WSSC, SEP or DRP permit obtained, Performance Bonds provided, all necessary easements obtained and recorded, all necessary permits for construction obtained and construction has actually started.

Surcharge – A condition in which the hydraulic grade in a gravity sewer is greater than the interior diameter of the sewer.

* For terms not defined herein, see the Development Services Process Manual Code, effective April 15, 2016, or any successor document.

Purpose

To establish the procedure for use of the WSSC Sewer Model during SEP Phase 1 Hydraulic Planning Analyses (HPA), other development or redevelopment in order to reduce to the maximum extent practical the probability of Sanitary Sewer Overflows (SSO) and excessive sewer surcharging in accordance with the purpose and intention of Section V, Article Five of the Consent Decree, Civil Action No. PJM 04-03679, Messite, 2005). This procedure applies to CIP-size sewer and all wastewater pumping stations included in the WSSC Sewer System Model. As described below, the WSSC Sewer Model may be used to assess the potential impact of proposed developments on the affected CIP size sewer system and determine any required conditions for service to be included in the Letter of Findings by WSSC.

The adequacy of local sewers (i.e. non-CIP-size) will continue to be evaluated by the Development Services Group.

Proposed Development above Projected 2-Year Overflow

This section shall apply to all proposed new developments or re-development (with an SEP or Site Utility Plan) that increase base sanitary flow from the site connecting into or upstream of any CIP-size trunk sewer stretches or any wastewater pumping stations that have projected overflows based on existing dry weather flow (including groundwater infiltration) and rainfall dependent infiltration and inflow from a 2-year design storm specified by WSSC. The applicants for such developments shall be required, as a condition for service, to obtain a Release for Service (RFS) from WSSC for the sewer system improvements needed to eliminate excessive surcharging, as determined by WSSC, under the 2-year storm after addition of the proposed base sanitary flow from the development under review. Consideration and evaluation of alternate solutions including construction of new sewer lines and facilities and/or rehabilitation/reconstruction of existing sewer mains, appurtenances, and facilities may be required. Any new sewers or facilities built shall be sized to handle projected future base sanitary flow and the infiltration and inflow from the 10-year design storm.

In addition, the development will be evaluated for the potential impact of any projected surcharging and, in particular, the potential for causing backups into homes or businesses. Any surcharging in a sewer segment that contains service connections in which the hydraulic grade within the sewer is higher than the basement floor elevation (for structures with basements) or first floor elevation (for structures without basements) is prohibited as the condition will potentially cause sewage backups into the structures. The applicants for such developments shall be required, as a condition for service, to obtain a Release for Service (RFS) from WSSC for the sewer system improvements that eliminate back-ups under the 2-year storm after addition of the proposed base sanitary flow from the development under review.

All Other Proposed Development:

All other proposed development projected to generate new base sanitary flow of over 100,000 net gallons per day (gpd) into a CIP-size trunk sewer or wastewater pumping station shall be modeled to determine potential impact on that CIP-size trunk sewer or wastewater pumping station. Modeling conditions shall include the existing sewer system, any proposed sewer system improvements under construction at the time of the HPA or HPA amendment under review by WSSC, existing dry weather flows (including groundwater infiltration), rainfall dependent infiltration and inflow from a 10-year design storm specified by WSSC, the proposed base sanitary flow from the development under review, and the proposed base sanitary flow from any other developments in the subject sewer basin with an approved and unexpired HPA that are also projected to generate more than 100,000 net gallons per day.

Under these conditions, there shall be no projected overflows from the sewer system caused or exacerbated by the proposed development. Otherwise, the applicant shall be required to implement sewer system improvements that eliminate the risk of overflows under the 10-year storm and eliminate excessive surcharging under a 2-year design storm specified by WSSC. Consideration and evaluation of alternate solutions including construction of a new sewer lines and facilities and/or rehabilitation/reconstruction of existing sewer mains, appurtenances, and facilities may be required. Any new sewers or facilities built shall be sized to handle the projected future base sanitary flow and infiltration and inflow from the 10-year design storm. In addition, the development will be evaluated for the potential impact of any projected surcharging and, in particular, the potential for causing backups into homes or businesses.

WSSC may allow service to the development prior to the Release for Service of the sewer system improvements required herein only if the Applicant shows proof of “Start of Construction” of the sewer improvements, as defined herein. Depending on the size and scope of the required sewer improvements, WSSC may also place additional conditions upon Applicant, as determined by WSSC, prior to allowing WSSC service to the development at “Start of Construction”. Additional requirements, if any, shall be set forth in a Memorandum of Understanding signed by the Applicant and WSSC on or before the date that the SEP is issued for required sewer improvements.

HPA Amendments

Proposed developments shall be re-evaluated by WSSC at the time of any Letter of Findings amendment if there is any increase in the projected flow from the development into any off site sewers. Developments may also be re-evaluated by WSSC if any contiguous developments are submitted by the same applicant and the combined base sanitary flow exceeds the 100,000 gpd threshold. The results of the WSSC Sewer Model are valid as long as the HPA or HPA amendment Letter of Findings is valid.

Request for Waiver

Applicants for developments that are subject to this Standard Procedure (“SP”) may request a waiver of some or all of this SP’s provisions hereof in accordance with the following requirements.

A. Procedural Requirements

1. A Request for Waiver (“Request”) shall be in writing and shall be filed with WSSC’s Corporate Secretary. Each filing shall consist of one (1) paper original and one (1) paper copy, and must be executed by a duly authorized officer, director or principal of the applicant.
2. A Request shall be filed no more than thirty (30) days after the occurrence of the facts and circumstances on which the Request relies in demonstrating compliance with the legal standard set forth herein. A Request shall be complete upon filing, and shall contain documents, records and other evidence supporting all assertions of fact therein.
3. To demonstrate that grant of the Request is in the public interest, the applicant shall include with its Request a signed letter from the County Executive and/or the Chair of the County Council in which the development is located stating that the County Executive and/or

Chair: carefully reviewed the Request; understands why the Request is necessary; supports the Request; and recommends grant of the Request by the Commission.

4. Upon receipt, the Corporate Secretary shall: (a) assign a Log Number to the Request, (b) notify the Chair and Vice-Chair of receipt of the Request; (c) arrange to have notice of the Request appear on WSSC's Internet homepage (www.wsscwater.com) within three (3) business days of receipt; and (d) forward the original to the General Manager/CEO.
5. Upon receiving the Request from the Corporate Secretary, the General Manager/CEO shall have thirty (30) days to review the Request, assess its merits and prepare a recommendation to the Commission regarding the Request's disposition. In preparing a recommendation, the General Manager/CEO may consider any public comment received during the thirty (30) day period.
6. The Commission shall act on the Request within 60 days of receiving the General Manager/CEO's written recommendation, which time period may be extended by agreement of the Applicant and the General Manager/CEO. The Corporate Secretary shall notify the applicant in writing of the Commission's action on the Request within five (5) business days thereof.

B. Commission Action and Legal Standard

1. The Commission may deny the Request or grant it in whole or in part. The Commission may impose conditions it deems appropriate on any grant of the Request.
2. Any grant in whole or in part shall be based on the Commission's determination that:
 - (a) considering the specific facts and circumstances presented in the Request, application of those SP provisions for which a waiver is sought will be unduly burdensome or will cause an undue hardship;
 - (b) the underlying purpose of the SP will be disserved or frustrated by applying its requirements to the facts and circumstances set forth in the Request; and
 - (c) the granting of the Request will be in the public interest.