Section 303 Stormwater Management Requirements for Connection to the Combined Sewer System

Stormwater connections or modifications which involve stormwater ultimately tributary to the combined sewer system shall be subject to the District's Policy for Stormwater Detention Facilities, as specified below:

A. SMALL SITES - Site with less than ¼ acre of disturbed area:

   a. Sites meeting this criteria are not subject to stormwater detention requirements unless they are part of a larger common development plan that as a whole would not meet the size limit.

B. LARGE SITES – Sites with ¼ acre or larger of disturbed area:

   a. Sites ¼ acre or larger are required to provide stormwater detention based on the Critical Storm Method as described below:

If the volume of runoff from an area after development will be greater than the volume of runoff from the same area before development, it shall be compensated by reducing the peak rate of runoff from the critical storm and all more-frequent storms occurring on the development area to the peak rate of runoff from a one-year frequency, twenty-four-hour storm occurring on the same area under predevelopment conditions. Storms of less-frequent occurrence (longer return periods) than the critical storm up to the one-hundred-year storm shall have peak runoff rates no greater than the peak runoff rates from equivalent size storms under predevelopment conditions.

The critical storm is found using calculations described in the USDA, Urban Hydrology for Small Watersheds – 2nd Edition (Technical Release No. 55) to determine the total volume of runoff from a one-year frequency, twenty-four hour storm event for the pre-development and post-development conditions. Then determine the percentage increase in the volume of runoff due to development, and using the chart below, select the 24 (twenty- four) hour critical storm. (Note: Rational Method may be used at the discretion of MSD)

Runoff Volume Increase (%)		**Critical Storm**
Equal to or greater than	**And less than**	**Peak Rate Control**
--	10	1-year
10	20	2-year
20	50	5-year
50	100	10-year
100	250	25-year
250	500	50-year
500	--	100-year

b. Sites 1 acre or larger are also required to provide water quality volume and release rates meeting the OEPA water quality volume requirements found in the OEPA NPDES Construction General Permit.

    a. The requirements of this portion of the regulation are permitted to be incorporated within the detention requirements based on the critical storm method as long as the individual conditions of each requirement are met.

    b. The use of green infrastructure stormwater management controls to reduce runoff rates to the combined sewer will be considered an acceptable method to meet stormwater requirements.

c. The outlet structure shall be staged to meet release rates required by both the OEPA water quality guidelines and the critical storm method.

C. TRANSPORTATION PROJECTS

    a. Transportation projects limited to resurfacing of existing facilities are not required to provide stormwater detention.

    b. Transportation projects that result in no increase in impervious area, but will involve complete reconstruction of the roadway are required to install separate storm sewers within the project boundary.

    c. Transportation projects with 1 acre or larger of disturbance that will result in an increase of impervious area, are required to provide detention as described in this regulation, as well as the installation of separate storm sewers within the project boundary.

        i. MSD reserves the right to alter or waive this requirement based on the specific nature of the project, and the particular CSO basin in which the project is located, with the goal of no additional CSO volume.

D. MSD may permit the use of alternate stormwater calculation methods as deemed appropriate by the district.

E. All detention facilities shall provide a passive emergency discharge outlet capable of conveying the 100-yr storm, which shall be used only when the required storage volume is exceeded. 50 and 100-yr events may use the overflow spillway for control unless these events are the critical storm.

F. Stormwater detention facilities shall be private with operation, maintenance and associated liability thereof being the responsibility of the owner. A stormwater detention pond or lake location must have its private storm drainage limits prepared by the Developer or his Engineer on a record plat by the metes and bounds description. The record plat is to be submitted to MSD for review and approval. The District shall have the plat recorded. The said limit area and all improvements in it shall be maintained continuously by the Owner. No structures, planting or other material, shall be placed or permitted to remain which may obstruct, retard or change the direction of the flow of water through the drainage channel in the said limits. Similar requirements shall apply for private storm basin easement limits when multiple owners are

involved.

G. For protection of the environment and downstream property, the District's detention requirements may be more restrictive in sensitive areas. Any waiver of or exception to these requirements shall be determined by the Director on a case-by-case basis. Responsibility for proper maintenance of detention facilities and appurtenances shall be with the property owner granted permission to make connection with the District's combined sewer system. It shall be the responsibility of any current or subsequent owner to transfer and record this responsibility should property ownership change. Under no circumstances shall alterations affecting the volume, operation, or release rate be made without first obtaining written permission from the District.

K. Other governmental agencies may impose their own jurisdictional detention requirements providing the release rates and storage volumes meet or exceed those satisfactory to the District as determined by the Director.

L. MSD has the authority to inspect any detention facility tributary to the combined sewer system. Based on these inspections MSD may require maintenance to the facility, which, if not performed, may be performed by MSD and billed to the owner. Failure to meet the requirements of this section may also result in fines in accordance with policies outlined in Article XXII of MSD's Rules and Regulations.

M. If a detention facility already exists on a property to be redeveloped, the existing basin volume must remain in place even if the impervious area is decreased after redevelopment. Any additional impervious area added to the site, must be detained using the critical storm method in addition to the existing detention basin.