Michael R. Bloomberg
Mayor

NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DEP
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Emily Lloyd
Commissioner

Comprehensive Water Reuse Program

Application and Instructions

Property Borough:_____ Block:_____ Lot:_____

Property Address:_____

Owner Name:_____

Owner Address:_____

Owner City/State/Zip:_____

Owner Phone:_____ Owner Email:_____

Contact Person:_____

Contact Address:_____

Contact City/State/Zip:_____

Contact Phone:_____ Contact Email:_____

Summary of Requirements:

1. The building must have a water reuse system that results in a reduction in consumption of approximately 25% compared to a similar building without a water reuse system.
2. The building must have a system that captures and detains stormwater.
3. The water reuse and stormwater collection systems must meet the requirements of the New York City Department of Buildings, the New York City Department of Health, DEP, the New York State Department of Environmental Conservation and any other agencies having jurisdiction, as applicable.
4. All toilets shall operate at no more than 1.6 gallons per flush, all urinals shall flush at no more than 0.5 gallons per flush, all showerheads at no more than 2.5 gallons per minute and all clothes washers shall consume no more than 9.5 gallons per cubic foot. All faucets shall flow at no more than 2.5 gallons per minute except that lavatory faucets in non-residential occupancies shall flow at no more than 1 gallon per minue and shallbe equipped with automatic controls which prevent flow for more than 15 seconds without repeated activation..

Detailed requirements are provided in Part VI Section 10 of the New York City Water Board's Water and Wastewater rate schedule.

List of Submissions for an Application

Unless otherwise noted, five sets of paper submissions shall be made to:

Deputy Commissioner, Bureau of Customer Services
CWRP Rate Application Reviews – Bureau Engineer
New York City Department of Environmental Protection
59-17 Junction Blvd. BCS 13th Floor
Flushing, NY 11373-5108

1. A schematic flow diagram and narrative description of the water reuse and stormwater collection systems. The schematic shall include the proposed locations of process meters.
2. A spreadsheet analysis of flow through the systems: potable water being consumed each day, water flowing through the reuse system per day and how it is reused for non-potable purposes, stormwater collection and how it will be reused (if it is), and the amount of wastewater flowing into the sewer. A list of recommended assumptions is provided below. Design values shall not be accepted.
3. Compliance with the clothes washer requirement means that the clothes washers must be EnergyStar rated. Regardless of whether the owner's representation is that the only clothes washers shall be located in central laundry rooms, lease agreements must indicate that any non-EnergyStar clothes washer (or, if the owner prefers, any clothes washer) found in an apartment shall be a basis for eviction or removal of the clothes washer. The language shall protect against a failure to detect an "illegal" clothes washer from preventing enforcement of the lease language.
4. A list of expected regulatory approvals that will be sought, with a signed/sealed cover sheet from a Registered Architect or Licensed Professional Engineer.
5. Final signed/sealed design drawings and catalog data for the water reuse, dual plumbing system and stormwater systems, including pipe and tank sizes and cuts of the proposed process meters. These documents shall be submitted at the time the building applies to DEP for site water/sewer connections.
6. Copies of all permits and/or variance documents from all appropriate regulatory authorities, including, but not limited to, DOB, DOH, Certificate of Occupancy and completed meter permits.
7. An owner can apply for an "Initial Application Approval" through submission and acceptance of Items 1-4, above. Final approval will occur after review of Items 5 and 6 and review of the as-installed system. DEP retains the right to read all meters after providing reasonable notice.

Metering of Recycled Water Systems

The incoming entire premises water meter shall be compound, single-jet, magnetic or turbine meter based on DEP's List of Approved Water Meters and Related Equipment. A turbine meter shall only be used if all incoming supply is being pumped.

There shall be meters for all inputs to any recycled water storage tank and meters for all outputs from the storage tank, or equivalent so that the volume of water being recycled and the volumes of recycled water being reused or being dumped to the sewer can be measured. The building shall maintain daily logs of these meter readings and DEP shall be provided access to inspect and read the meters on reasonably notice.

The meters used should either be single-jet meters with absolute encoder registers or approved magnetic meters. Displacement, compound and turbine meters shall be used only if the manufacturer certifies in writing that the meter is qualified for use with the quality of the water present in the recycled water systems.

Sample Spreadsheet Summary Table

The spreadsheet analysis described in Item 2, above, shall flow into a summary cover sheet with units of gallons per year.

Water Recycling System Potable Water Savings Summary			
	Standard Building	**Proposed Building**	**Savings Potable Water**
Toilet/Urinal Use			
Irrigation			
Evaporative Cooling			
Other Uses (Specify)			
Total			

Analysis Assumptions

Residential Indoor Use: 60 gallons per person per day

Residential Toilet Flushes: 4 per person per day

Office Building Indoor Use: 10 gallons per employee per day

Evaporative cooling use must be based on an annual number of ton-hours of cooling to be provided with an explanation of how that estimate was calculated.

Landscaping use must be calculated on the expected area to be irrigated and on a reasonable (i.e., not excessive) amount of water to be applied no more often than every other day, minus an allowance for rain days.

The expected number of residents per dwelling unit (residential properties) and employees shall be noted for all calculations.

Sources for Water Use Information

Dziegielewski, B et. al. 2000. Commercial and Institutional End Uses of Water, AWWA Research Foundation, Publication 90806.

Mayer, P.W. et. al. 1999. Residential End Uses of Water, AWWA Research Foundation, Publication 90781.

Vickers, A. 2001. Handbook of Water Use and Conservation. Waterplow Press.