

[REDACTED]

Water Efficiency Economic Assessment Policy

LEED-EBOM WE Prerequisite 1

February 1, 2012

PURPOSE

The purpose of this policy is to ensure that a water efficiency economic assessment is performed at [REDACTED] for any future water fixture upgrades at the building and that water use reduction strategies are explored at this time.

SECTION 1: POLICY SCOPE

This plan applies to all indoor potable water fixtures and fittings within [REDACTED], [REDACTED]

SECTION 2: POLICY GOALS

This policy mandates an economic assessment of conversion to high-performance plumbing fixtures and fittings as part of any future indoor plumbing renovations. Any replacement fixtures will meet or exceed the following UPC/IPC Standards and [REDACTED] will strive to meet the following EPA WaterSense Standards wherever possible:

Fixture	UPC/IPC Standards	EPA WaterSense Standards
Water Closet	1.6 GPF	1.28 GPF
Urinal	1.0 GPF	0.5 GPF
Public Lavatory Faucet	0.5 GPM	
Private Lavatory Faucet	2.2 GPM	1.5 GPM
Kitchen/Janitorial Sink	2.2 GPM	
Shower	2.5 GPM	

SECTION 3: PERFORMANCE METRIC AND TARGETS

Water efficiency economic assessment shall be performed as part of any future indoor plumbing renovations, balancing economic analysis with water efficiency goals. Based on the USGBC LEED for Existing Buildings: O&M (LEED-EB:O&M) water efficiency criteria and guidelines for performance measurement, [REDACTED] has set the following goals:

1. 10% reduction in indoor plumbing fixture and fitting potable water use from the LEED for Existing Buildings: O&M baseline*.

*For a plumbing system substantially completed after January 1, 2004 throughout the building, the baseline is 120% of the water usage that would result if all fixtures and fittings met the UPC/IPC Standards cited above. For a plumbing system substantially completed prior to 1994 throughout the building, the baseline is 160% of the water usage that would result if all fixtures and fittings met the UPC/IPC Standards cited above.

SECTION 4: RESPONSIBLE PARTY

The Property Manager and Chief Engineer shall implement this policy within [REDACTED] in coordination with other appropriate personnel as needed. The Property Manager and the Chief Engineer shall ensure that this policy is distributed to all relevant personnel, with the aim of promoting and maintaining the goals of this policy.

SECTION 5: PERFORMANCE EVALUATION

The best management practices described in this plan will be evaluated annually for compliance and the outcome submitted to senior management.

SECTION 6: PROCEDURES AND STRATEGIES

Any water efficiency economic assessment will take into account the following first costs and operational savings:

1. Equipment costs
2. Installation labor
3. Water utility savings
4. Sewage utility savings
5. Potential Maintenance Costs
6. Hot water energy savings

SECTION 7: TIME PERIOD

This policy shall take effect on February 1, 2012 and shall continue indefinitely or until amended and/or replaced by a subsequent policy.

RELEVANT DEFINITIONS

Nonpotable Water is water that is not suitable for human consumption without treatment that meets or exceeds EPA drinking water standards.

Plumbing fixtures and fittings are receptacles, devices, or appliances that are either permanently or temporarily connected to the building's water distribution system and receive liquid or liquid-borne wastes and discharge wastewater, liquid-borne waste materials, or sewage either directly or indirectly to the drainage system of the premises. This includes water closets, urinals, lavatories, sinks, showers and drinking fountains.

Potable Water is water that is suitable for drinking and is supplied from wells or municipal water systems.

Substantial completion is defined as either initial building construction or the last plumbing renovation of all or part of the building that included a 100% retrofit of all plumbing fixtures and fittings as part of the renovation.