

GEW180-14

Table 705.1.1

Proponent: Ed Osann, representing Natural Resources Defense Council
(eosann@nrdc.org)

Revise as follows:

**TABLE 705.1.1
METERING REQUIREMENTS**

APPLICATION	REQUIREMENTS
Irrigation	In-ground irrigation systems for outdoor landscaping <u>Irrigation systems that are automatically controlled</u> shall be metered.
Non-residential tenant <u>Non-residential tenant spaces</u>	Tenant <u>Non-residential tenant spaces such as for medical offices, dental offices, dine-in restaurants, cafeterias, laundries and any other occupancy that is estimated to consume over 1000 gallons of water per day shall be metered individually.</u>
<u>Residential tenant spaces</u>	<u>Residential tenant spaces shall be metered individually.</u>

(Portions of table not shown remain unchanged.)

Reason: This proposal establishes separate metering requirements for residential and non-residential tenant space. Specified occupancies that are characterized by significant levels of water consumption are listed and required to be separately metered, together with any other occupancies that are estimated to use over 1,000 gallons per day as in the present language. This approach removes the need for an estimate of future water use for the most common high-water-use occupancies.

This proposal also requires the installation of water sub-meters for individual units in newly constructed apartment buildings. Public water suppliers typically do not install meters of their own on water supply piping to individual units, and occupants typically pay for water and sewer service as part of their rent or condominium fee. Sub-metering in new multi-family buildings, when used for allocating the cost of water and wastewater service to individual dwelling units, ensures that water users receive an appropriate signal regarding the volume and cost of their water use, and thus incentivizes residents to undertake responsible water use and prompt reporting of fixtures in need of repair.

Sub-metering is also useful in identifying leakage or unintended use in unoccupied dwelling units within multifamily buildings. The National Multiple Family Sub-metering and Allocation Study (2004), sponsored by the US EPA and thirteen public water suppliers in different parts of the country, demonstrated that sub-metering reduces indoor water consumption substantially, by about 16% or 7,960 gallons per household unit per year, as a mid-range estimate. Nationwide, an estimated 5.9 million additional households will be living in multifamily housing by 2030 compared with 2015 (US Energy Information Agency, *Annual Energy Outlook 2011*, Residential Sector Key Indicators and Consumption, Reference Case). If beginning in 2016 all new multifamily housing is equipped with sub-meters used for billing allocation, even a conservative savings estimate of 3,110 gallons per unit per year (the value at the lower bound of the confidence band of the 2004 National Study estimate) yields water savings of 388 million gallons per day by 2030. Additionally, the measurement of water used for landscape purposes and for outdoor water features, such as swimming pools, ornamental ponds, and fountains, is essential to the effective management and avoidance of waste in large multi-family properties. This proposal also makes clarifying changes in the language requiring metering for landscape irrigation. The landscape metering requirement should not be determined by whether a system has automatic controls or not, but rather whether the irrigation system is in-ground, and thus susceptible to hidden leaks and the malfunctioning of permanently installed equipment.

Bibliography:

National Multiple Family Sub-metering and Allocation Study (2004), sponsored by the US EPA.

Cost Impact: Will increase the cost of construction. The estimated cost to install a sub-meter in new construction is \$175. The National Multiple Family Sub-metering and Allocation Study cites \$150 per meter. Additionally, according to Northland Investment Corp, water sub-meters can be installed for \$125 to \$175 per meter (see <http://www.allbusiness.com/real-estate-rental-leasing/real-activities-related-to-real/680669-1.html>) and as per the City of San Diego, it costs \$150 - \$300 per unit to install sub-meters in new construction (See <http://www.sdn.com/sandiego/2010-04-02/politics-city-county-government/city-council-to-consider-new-water-meter-rules#ixzz0jyvUjrD>).

However, installation of sub-meters to allocate the cost of the building's water and wastewater service to individual occupants removes these utility costs from the owner's income statement and effectively increases the net cash flow and capitalized value of each rental unit.

GEW180-14: TABLE 705.1.1-OSANN1170