NYC GREEN CODES
LEGISLATION AT A GLANCE

GCTF Proposal
Stop Wasting Drinking Water for Cooling

Implemented
Local Law 56 of 2010

Summary
“Once through” cooling systems emit heat into portable water, which is then drained into the sewer. No other cooling systems waste water in this manner.

This law prohibits the use of potable water for new once-through cooling systems.

New Requirements or Changes

Effective: January 1, 2011. These changes do not apply retroactively; they are only triggered when construction activity requires a permit for work covered by this section of the Plumbing Code.

• Adds a definition for “Once-Through Cooling”
• Prohibits the use of potable water for once-through cooling, including refrigeration, air conditioning or other mechanical or process uses.
• Exceptions:
  o Non-potable water may still be used for once-through cooling.
  o Does not apply to water used to cool steam condensate.
  o Once-through cooling may be used for ice makers producing less than 500 lbs of ice per day.
  o The law permits repairs or replacement of water-cooled ice making machines, walk in coolers, refrigerated walk in boxes and air conditioning units installed prior to January 1, 2011. Any replaced units may only use the same or lesser amount of potable water.

Enforcement

These new and revised provisions are a standard part of the Plumbing Code. They will be enforced by the Department of Buildings in the same manner as any other element of the Construction Codes.

Implementation

It is unclear how properties will prove that they have existing water-cooled equipment since many of these units are not filed with the Department of Buildings.

Even though the law grandfather existing once-through cooling units, replacing them can lead to substantial operating savings due to the cost of water and sewage. Once-through cooling is primarily used to cool food service refrigeration equipment, and replacing these units with air-cooled equipment, or connecting them to a chilled water loop, typically results in savings in excess of $3,500.00 per ton of cooling per year. The prime motive for installing
water-cooled units in spite of the large operating costs is that they do not require ventilation so there may be no alternative in some locations.

Special thanks to Hershel Weiss (Ashokan Water Services), member of the NYC Green Codes Task Force Committee on Water Efficiency, for his assistance in preparing this summary.