The Use of Once Through Cooling and Single Pass Systems

The purpose of this Bulletin is to advise contractors, consultants, suppliers and owners of changes to Water Works By-law 4848 regarding single pass systems, such as once through cooling equipment.

The Water Works By-law (WWBL) has been amended to prohibit the connection of once through cooling equipment, non-recirculating liquid ring pumps and other single pass systems to the City’s water system (WWBL Section 3.9).

Additionally, existing once through cooling equipment, non-recirculating liquid ring pumps and other single pass systems must be disconnected from the City’s water system by January 1, 2020 (WWBL Section 3.10, which also defines exceptions).

Acceptable: Air-cooled systems

Prohibited: Once-through cooled systems

Explanation:

Once through cooling systems use drinking water in a single pass as a cooling medium. The water used for this process is then drained to the sewer. As a result of this wasteful use of drinking water, many jurisdictions in North America have banned their use. Alternative systems, such as air-cooled systems, are readily available.

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