Recommended Cooling Tower Maintenance:

**Daily or a couple times a week**:

1. Check water treatment systems for leaks, loss of prime, sufficient chemicals and proper operation. Note, if treatment systems are controlled and monitored by the BAS, this daily check may not be needed.

**Weekly:**

1. Check water treatment systems for leaks, loss of prime, chemical levels and proper operation.
2. Calibrate tower Water treatment sensors as required and recommended by water treatment company/specialist.
3. Check for proper operation of Make-up water treatment systems. Check Tower and associated piping for leaks, unusual noises and vibrations.

**Monthly:**

1. Do weekly check.
2. Check Tower and associated piping for leaks, unusual noises, sounds and vibrations.
3. Check and flush strainers/filters etc. as needed.
4. Check for proper operation of control valves.

**End of season preparation for non-operational periods:**

1. Clean the entire cooling tower system, including the basin, sump, fill material and water distribution system. Remove any debris, sediment, or biological growth that may have accumulated.
2. Completely drain the cooling tower system to remove all water. This minimizes the risk of stagnant water, which can lead to bacterial growth, scale formation and corrosion. Pull and clean any strainers in the system. Ensure that the system is dry and free of moisture before proceeding.
3. Conduct a comprehensive inspection of the cooling tower components. Look for any signs of damage, such as cracks, leaks or worn-out parts. Address and repair any issues found.

**Prior to Start-up:**

1. Inspect Cooling tower exterior.
   1. Look for signs of damage, corrosion or leaks.
   2. Check structural integrity, fan blades, louvers and access doors.
2. Examine Drift eliminators and Fill Material
   1. Look for and correct any blockages, obstructions or signs of wear and tear.
   2. Clear any debris or scaling from the drift eliminators.
   3. Ensure that the fill material is intact and evenly distributing water throughout each cell.
3. Clean the basin and the sump.
   1. Drain and clean the basin.
   2. Remove any accumulated dirt, leaves or other foreign objects.
   3. Use a recommended biocide or cleaning agent to eliminate bacteria, algae and fungi that can lead to fowling and reduced performance.
4. Check the Water treatment System.
   1. Inspect the chemical feeders, filters and PH control systems.
   2. Verify the feeders are pumping correctly and dosing the proper quantities and insure there are no leaks.
   3. Perform re-calibration of sensors as recommended by water treatment consultant.
   4. Check for proper operation of make-up water pre-treatment systems (i.e. filters, softener etc.)
5. Fan System:
   1. Check fan motor for proper alignment, operating temperature, and that it is properly lubricated.
   2. Check and service drive system/gear box, belts, bearings etc. Make sure lubricants are properly applied and/or changed as required by equipment.
   3. Inspect fan(s) for any sign of damage, imbalance or foreign matter build-up. Clean as necessary.
6. Water Distribution System:
   1. Inspect water distribution system. See that the water is distributed evenly over the fill material and that none of the nozzles are clogged or malfunctioning. Repair/replace as needed.
   2. Inspect the water piping for leaks, blockages and corrosion. Remove any scale or deposits that may have accumulated. Check valves, fittings and couplings for proper operation and tightness. Repair or replace any damaged components as necessary.