**RO System Preventive and Periodical Checks & Maintenance during CAMC Period (6th, 7th, 8th, 9th & 10th year) at Quarterly interval for every year from 6th to 10th year:**

***Note: The Unconditional Warranty is applicable as per Agreement - Section-IV - General Conditions of Contract – Clause:15.***

1. **Pre-Inspection Preparation:**

Before commencing any maintenance activities, ensure strict adherence to safety protocols. This includes powering off the RO system to prevent accidents. Gather all necessary tools, including TDS meters, pressure gauges, and pH meters.

1. **Visual Inspection:**

Thoroughly examine all system components for signs of corrosion, leaks, or damage. Check connections, fittings, seals, and gaskets for tightness and integrity. Assess the condition of structural supports and mounting brackets.

1. **Pre-Treatment Maintenance:**

Clean and inspect pre-filters, sediment filters, and carbon filters. Replace any filters that are clogged or ineffective. Ensure proper operation of pre-filter housings to prevent bypass.

1. **RO Membrane Inspection:**

Conduct a detailed examination of RO membranes for fouling, scaling, or damage. Measure pressure differentials across membranes and clean if necessary. Inspect membrane housings for defects.

1. **Sand Filter Maintenance:**

Drain and inspect the sand filter vessel for sediment buildup. Replace sand media if necessary. Check sand filter components for proper function.

1. **Activated Carbon Filter Maintenance:**

Assess the performance of activated carbon filters and replace media if exhausted. Inspect filter housing for leaks or corrosion.

1. **UV System Inspection:**

Inspect UV lamps, quartz sleeves, and O-rings for damage. Verify UV system flow rate and test monitoring systems and replace if damaged.

1. **Recirculation Loop Maintenance:**

Check recirculation loop components for leaks or mechanical wear. Verify flow rates and clean or replace filters as needed.

1. **Drainage Outlet Inspection:**

Inspect drainage outlets for proper functioning and clear any obstructions. Check for corrosion in drainage piping.

1. **System Performance Audit:**

Conduct water quality testing and evaluate system efficiency. Measure key parameters and identify areas for improvement.

1. **Safety Checks:**

Verify the functionality of all safety features and emergency shutdown mechanisms. Test pressure relief valves and inspect electrical components.