Claims

1. System for treating and maintaining a body of water affected by bacteria and microalgae, the system comprising:
   - at least one feeding line of water to at least one containing means;
   - at least one containing means comprising a receiving means for settled particles that is fixed to a bottom surface of said containing means;
   - at least one coordination means, wherein the coordination means timely activates processes necessary to adjust parameters of the water quality within predetermined limits;
   - at least one chemical application means, where the chemical application means applies chemical agents to the water stored in containing means;
   - at least one mobile suction means for moving along the bottom of said at least one containing means and suctioning water containing settled particles;
   - at least one propelling means for moving at least one mobile suction means along the bottom of said at least one containing means;
   - at least one coupling means that connects said at least one propelling means to said at least one suction means;
   - at least one filtration means for filtering water containing settled particles
   - at least one collecting line coupled between said at least one mobile suction means and said at least one filtration means; and
   - at least one return line from said at least one filtration means to said at least one containing means.
2. The system of claim 1, wherein the receiving means comprises a membrane, geo-membrane, geotextile membrane, concrete, coated concrete, plastic liner, or a combination thereof.
3. The system of claim 1 or claim 2, wherein the coordination means is capable of receiving information, processing that information, and activating the processes.
4. The system of any one of claims 1 to 3, wherein the chemical application means comprises an injector, a sprinkler, a dispenser, piping, or a combination thereof.
5. The system of any one of claims 1 to 4, wherein propelling means comprises a rail system, a cable system, a self-propelled system, a manually propelled system, a robotic system, a system guided from a distance, a boat with an engine, a floating device with an engine, or a combination thereof.

6. The system of any one of claims 1 to 5, wherein the mobile suction means is coupled to the propelling means by the coupling means.
7. The system of any one of claims 1 to 6, wherein the coupling means comprises a flexible cord, rope, line, cable, string, or a combination thereof.
8. The system of any one of claims 1 to 6, wherein the coupling means comprises a rigid rod, bar, pole, shaft, or a combination thereof.
9. The system of any one of claims 1 to 8, wherein the filtration means comprises a cartridge filter, sand filter, micro-filter, ultra-filter, nano-filter, or a combination thereof.