

## **Sole Source Justification HydroFLOW Water Conditioners**

June 15, 2018

## Dear YOUR COMPANY:

I, REGIONAL DISTRIBUTOR, do hereby verify Critical Environmental Solutions (CES) (DBA HydroFLOW KY) is the entity YOUR COMPANY should communicate with regarding HydroFLOW products. As our representative in the State of ------, all MOU's, contracts, agreements and purchase orders should be betweenYOUR COMPANY and CES.

## Additional clarifications:

- HydroFLOW USA has been the master distributor of HydroFLOW products since September 2010.
- CES was appointed as the exclusive distributor of HydroFLOW products in the states of Kentucky, Indiana, Ohio, West Virginia, and Tennessee in March of 2018.

Specifications for environmentally-friendly, chemical-free water conditioning, prevention and removal of hard water scale and bio-film, eradication of bacteria and algae, and significant corrosion reduction inside piping systems.

To the best of my knowledge, *Hydro*FLOW products are unique due to the following reasons:

## **US Patents:**

9,140,412	Method and apparatus for treating fluid in a conduit with radio-frequencies
9,032,610	Process of establishing electrodes in a liquid
8,231,786	Water purification method and apparatus involving generation of bipolar layer
8,168,059	Inhibition of corrosion of structures
8,033,334	Treating liquids in oil extraction
8,029,669	Fluid treatment method and apparatus

- 2. The device generates a diminishing 150 kHz 250 kHz sinusoidal electrical field, with a different wait state, into the water. The electrical field is propagated upstream and downstream, not dependent upon flow for functionality.
- 3. The device creates a varying circular magnetic field concentric with the water pipe so that an electric field is induced into the water across the cross-section of the pipe.
- 4. The device is not in contact with the water being treated, and no modification of existing system and pipework is required for installation.
- 5. The device is suitable for fitting on copper, steel, iron, plastic and PEX pipes of any nominal pipe size, with no restriction of maximum diameter.
- 6. The device is not exclusively magnetic or electrostatic. No magnet or electrical wire is wrapped around piping.
- 7. The device is certified by an accredited laboratory to kill bacteria Legionella, Staphylococcus Aureus, and Escherichia Coli within one hour in a water circulation system with a flow rate of five feet per second or greater.
- 8. The device induces an electric field that alters the crystallization process so as to eliminate the formation of hard scale.
- 9. The device gradually removes existing limescale deposits in pipes and on equipment.
- 10. The device contains a signal indicator which signifies the induction of an electric field into the liquid solution.
- 11. The device contains a fault analyzer which indicates repair is needed.
- 12. The device creates an electric field with at least 10V peak-to-peak and consumes no more than 65W.
- 13. The device is built on solid state technology that requires no maintenance or replacement of parts.
- 14. The device is compatible and non-corrosive to piping material and equipment.
- 15. The device remains effective under a wide range of temperature changes, varying flow rate, pH, conductivity, total dissolved solids and alkalinity.







- 16. The device complies with the relevant international specifications required for conducted and radiated emissions.
  - a. EN55011 (emission)
  - b. EN1000-3-2 and 3-3 (conducted)
  - c. EN6100-6-1 (immunity)
- 17. Residential-purpose devices have a one-year full manufacturer's warranty.
- 18. Commercial/Industrial-purpose devices have a three-year limited manufacturer's warranty.
- 19. All devices have a calculated MTBF (Mean Time Between Failure) of 36 years.
- 20. The device is manufactured to ISO 9001:2008 quality management standards.

HydroFLOW USA LLC and its distributor and dealer network has the sole distribution rights in the United States of America (and all US Government facilities / Military bases worldwide) for the HydroFLOW water conditioner model ranges powered by Hydropath Technology listed below:

- **HS38**
- **S38**
- **HS40**
- I Range
- **HM Range**

Please contact me directly with any question or concern.

Respectfully,

Tal Joseph

