

EPA Regulation with regards to onsite production, usage, storage and transport of onsite produced *Hypochlorous Acid* (7790-92-3)

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EPA Regulation with regards to onsite PRODUCTION of pesticides with AQUAOX™ Devices

Under Section 3 of the Pesticide Regulations under the Federal Insecticide Fungicide and Rodenticide Act, as amended (FIFRA), the EPA regulates pesticides, which are registered and sold in interstate commerce to control various forms of vermin.

Under these regulations (Subpart Z –Devices Part 152.500, “Requirement for devices”) **Pesticide Devices are not required to be registered, but must have an approved label which meets Section 3 Regulations, Part 162.10, and have a registered establishment in which they are produced.** Under Section 7 of the FIFRA each owner of a pesticide device must provide to the EPA enforcement program a report of products produced each and every year and to whom they are sold in a standard report form.

Common examples of these type of devices are electronically generated ozonators for treating drinking water, chlorinators which produce Free Available Chlorine from the electrolysis of water and salt, electrically activated copper/silver cathodes which causes the release of silver and copper ions into drinking water and “invisible” noise mechanisms that remediate insects and rodents in small areas. In each, case the device is unique and is based upon data which the device originator has on file or can provide references to EPA as being a product that is efficacious and safe when used as directed.

Devices are subject to labelling and misbranding requirements under FIFRA section 2(p) and 2(q); registration and reporting requirements under FIFRA section 7; recording keeping requirements under FIFRA section 8; inspection requirements under FIFRA section 9; import and export restrictions under FIFRA section 17; and child resistant packaging requirements imposed pursuant to FIFRA section 25 (c)(3).

AQUAOX devices have an EPA establishment number and we submit reports to EPA pursuant to Section 7 of the Act. The on-demand, onsite device uses sodium chloride (table salt) dissolved in water and an electric charge to produce *Hypochlorous Acid* (HOCL), which kills bacteria, mold, mildew, viruses and surface filling algae. The HOCL (200-500ppm Free Available Chlorine) does the killing of the life forms. When the electricity has been turned off, the device produces no HOCL solution and has no residual in it. Our device meets all the Section 3 labelling requirements and we pay close attention to all the FIFRA requirements so as to be fully compliant **No product is produced from our device for storage or later use per regulations.**

Electrolyzed water is approved under 21 CFR 173.315 for direct contact with processed foods. Electrolyzed water is approved for several indirect food contact applications under 21 CFR 172.892, 21 CFR 175.105, 21 CFR 176.170 and 21 CFR 177.2800. It is an approved sanitizer that meets 21 CFR 178.1010. The EPA has also given approval (40 CFR 180.1054) for washing raw foods that are to be consumed without processing.

40 CFR 180.940. HOCL when used as ingredient in an antimicrobial pesticide formulation may be applied to: **Food contact surfaces in public eating places, dairy-processing equipment, and food processing equipment and utensils. When ready for use, the end-use concentration of all *Hypochlorous Acid* chemicals in the solution is not to exceed 200 ppm determined as Free Available Chlorine**

The AQUAOX device does not require a hazardous use permit whereas chlorine requires a permit for filling, transportation and storage.

AQUAOX is unable to anticipate all conditions under which the product may be operated and users are advised to carry out a workplace risk assessment and their own tests to determine safety and suitability for the process and conditions of use. Should you require further information or clarification, please contact AQUAOX, LLC.

EPA regulation with regards to the USAGE and STORAGE of Neutral Electrolyzed Water generated onsite from an AQUAOX device

Under the FIFRA, EPA does not regulate water or sodium chloride (table salt) as a pesticide when used in an AQUAOX device that generates a pesticidal solution (HOCL).

The 0.2% HOCL-solution generated by the AQUAOX device is not regulated by the EPA as a pesticide as long as the solution itself is used on-site (i.e. where it is generated). However, if the solution is packaged, distributed or sold for use at a location other than the site at which it was generated, the product is subject to registration as a pesticide under FIFRA.

Accordingly, bottling and applying the solution on-site (e.g. 1 gallon containers) would not be subject to registration, but distributing and selling the product for use other than at the site of generation would be subject to registration.

The AQUAOX Device is considered to be a pesticide device and is subject to the requirements specified in 40 CFR 152.500, Requirements for Devices.

As long as the HOCL solution is applied onsite, no EPA requirements under FIFRA apply other than those specified above. However, EPA recommends that the operator of pesticide devices provide labels for plastic containers containing HOCL solutions so that workers and others will know what is in the containers and what precautions and directions should be followed handling and using the solution. Therefore, temporary storage of the HOCL solution is allowed as long as the HOCL solution is used onsite.

Finally, the operator of the AQUAOX device should check all state and local regulatory requirements that may apply to the AQUAOX device and the generated solution.

EPA regulation with regards to TRANSPORT of Neutral Electrolyzed Water generated onsite from an AQUAOX device.

AQUAOX's interpretation of the FIFRA is that transport of HOCL solution within the onsite location is permitted as long as HOCL solution is used onsite. Therefore, the transportation of HOCL solution in, (e.g. 1 gallon containers) to another department, building or place within the operator's organization, company and/or location is permitted

as long as the HOCL solution is used within the operator's organization, company and/or location.

Accordingly, storage in trucks should be permitted, as long HOCL is used within the operator's organization, company and/or location. In AQUAOX's opinion, onsite generated HOCL is permitted to be transported over the public road to another location to be used within the operator's organization, company and/or location. However, FIFRA and the EPA is very unclear about this particularly action. AQUAOX recommends to provide labels and a MSDS of HOCL on all containers or trucks filled with HOCL.

In addition to this, AQUAOX advises to have a FUNCTIONAL and WORKING AQUAOX device on a truck to be used for onsite generation of HOCL if a user is going to transport HOCL to a client for executing a service such as (e.g. fogging) a premises or spraying a surface.

EPA regulation on onsite generated pesticides *BOTTLED, PACKAGED, STORAGED* and *DISTRIBUTED (SOLD)*.

If the onsite produced HOCL is bottled, packaged, stored, distributed and sold, the HOCL solution is subject to registration as a pesticide. Thus, if HOCL is bottled, packed and sold as a liquid, the user of the AQUAOX Device **MUST** register HOCL as a pesticide to obtain a registration number for HOCL.

The registration of the onsite generated HOCL **MUST** be in the operator's name and the operator will be exclusively responsible for the produced pesticide.

CONCLUSION

Currently, AQUAOX manufactures, distribute and maintains onsite AQUAOX devices which are regulated by the EPA as **onsite pesticide devices** and two bottled EPA registered HOCL disinfecting products.

AQUAOX does not permit their distributors to register HOCL (onsite generated pesticide) as a pesticide.

AQUAOX does not advocate, nor promote users (owners/ final users of the AQUAOX Device) to register HOCL as pesticide. AQUAOX rejects all liability, if users do not comply with the FIFRA regulations for onsite pesticide devices. AQUAOX does not advocate or promote the usage of HOCL otherwise than used onsite.