



Contact: Keith Boulais
Premier Materials Technology
(763) 785-1411
keith@premiermaterials.com

U.S. Army Corps of Engineers report finds KRIA Ionizer with EcoSOAR™ technology reduces diesel and PCB in water
Ionizer also shown to increase dissolved oxygen levels through superoxide

MINNEAPOLIS (June 7, 2016) – A recent report by the U.S. Army Corps of Engineers shows promising results for the nation’s polluted waterways. Test results show the KRIA Ionizer with EcoSOAR™ technology reduces diesel and the polychlorinated biphenyl (PCB) Arochlor 1254 in water.

The KRIA Ionizer is a machine that creates superoxide and injects it into the water column through microbubbles. The Corps’ Engineer Research and Development Center performed the tests. One 55-gallon reactor spiked with pollutants was treated by the ionizer without superoxide, by turning the valve off; the other spiked 55-gallon reactor was treated by the ionizer with superoxide.

The report shows:

- Superoxide removed 58 percent of diesel after 72 hours of KRIA Ionizer operation, with significant removal beginning at two hours. There was no removal in the control.
- Superoxide significantly removed more of the PCB Arochlor 1254 compared to the control. After 72 hours of operation, the KRIA Ionizer’s superoxide removed 85 percent of the PCB, 20 percent higher than the control.
- Dissolved oxygen percentages were over 300 percent in the reactor treated with superoxide over 135 minutes. The control measured 100 to 113 percent.
- Oxygenation is a clear benefit of the KRIA Ionizer’s technology. This could help combat algal blooms in small lakes, ponds and wetlands; fight potential septic in wastewater lagoons; and treat water contaminated with petroleum hydrocarbons.
- While there was no removal of nitrate-ammonia, the report states that past research demonstrates additional reactions in the field may affect these concentrations.

“Diesel and PCBs are two of the most stubborn water pollutants, and the KRIA Ionizer’s breakthrough technology can reduce these pollutants without using additional chemicals,” said Keith Boulais, CEO of Premier Materials Technology, which distributes the machine. “It is a cost-effective solution that can help restore waterways to a clean, natural state.”

For more information or to download the full report, titled “Testing of the KRIA Ionizing Water Treatment System for Waters Contaminated with Diesel, PCBs, and Nutrients (Nitrogen Forms),” visit www.premierwatertreatment.com/usace.

About Premier Materials Technology

Premier Materials Technology is a leading supplier of quality marine products, including the KRIA Ionizer with EcoSOAR™ technology superoxide water treatment system. The company’s full-time staff has more than 45 years of marine experience, with expertise in environmentally friendly marine products. For more information about the KRIA Ionizer, visit www.premierwatertreatment.com.