

clean waterfront

product review



Water Quality Metrics and Performance Specifications

TECHBlue Center

Waterfront Solutions

www.cleanwaterfront.net

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Waterfront Product Analysis

Abstract

An analysis of compiled technical and market information needed to review the product life cycle (LCA), performance and cost benefits of the KRIA-EcoUSA Industrial Water Purifier manufactured by EcoUSA, LLC, Denver, CO

Recent assessments by the U. S. Environmental Protection Agency indicate that 44% of river and stream miles and 64% of lake and reservoir acres are impaired pursuant to section 305(b) of the U.S. Clean Water Act (E.P.A. 2009). The impairments are caused by the transfer of nutrients, toxic substances and pathogens from watersheds, and to a lesser extent airsheds, to receiving waters.

Large volumes of chemicals, many with potentially serious long-term toxicity problems, are put into lakes and other reservoirs regularly, in attempts to improve water quality

As they relate to the manufacture and distribution of the KRIA-EcoUSA Ionizer (industrial water purifying equipment) – independent professional reviews include:

- waterfront industry – overview of need
- product performance specifications
- case studies, prototype and testing standards
- parameters for distribution, contractors and maintenance service networks.

Case Study comments include data on the effectiveness of KRIA-EcoUSA equipment in site specific waterways and watersheds. The data; defined by area/depth (full water column, to water bed depths) and water quality benchmarks, note the following:

- A significant depletion of tracked pollutants, and contaminants.
- A significant increase of dissolved oxygen (DO) throughout the test area.
- Secondary changes in the water body, which restore a natural balance to the marine eco-system.



KRIA-EcoUSA prototype

This report is a first step in compiling technical and market information needed to review the product life cycles, performance and cost benefits of **Industrial Water Purifying Equipment**

ADVANTAGES OF SUSTAINABLE REVIEWS

TECHBlue Center¹ professional reviews produce company management information based on the following – as they relate technology used in, on, or near water bodies:

Evidenced-based Design – set and develop quantifiable criteria for product and project improvement.

Quality Control – maintain and comply with recognized industry standards². Interdisciplinary reviews (common denominators and benchmarks for waterway improvement).

Environmental Management – comply with recognized environmental policies (i.e. develop management methods which decrease regulatory review and permit time).

Distribution Efficiency – develop strategies and training methods for the supply chain (i.e. increase dealer cost/benefit margins).

Assurance & Performance – validate company policies and guarantees (i.e. market and business leadership).

¹The TECHBlue Center review process does NOT result in a certification. Sustainable site and product characteristics change overtime, which in-turn will change review specifications and may change industry benchmarks. Reviewed products and applications may receive a rating relative to a benchmark for improvement. See TECHBlue Policies and Practices..

²Recognized by International Standards Organization (ISO), American Society for Testing and Materials (ASTM), Construction Specification Institute (CSI) and by professional industry peer-review.



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