# Introduction of Far-UVC Technology for Next-Generation RAS System at Kamome Mirai Suisan's Fukushima Land-Based Aquaculture Facility

BEAM Technologies Inc. (Tokyo, CEOs: Kazuki Iimura and Yuuri Itokazu) is pleased to announce that its Far-UVC solution "BEAMCURE" has been introduced at Kamome Mirai Suisan Co., Ltd.'s fully enclosed, recirculating land-based aquaculture facility, the "Land-Based Aquaculture Innovation Center" in Namie Town, Fukushima Prefecture.

#### **About the Initiative**

Kamome Mirai Suisan Co., Ltd. is working to establish land-based aquaculture production technologies expected to support the future of sustainable fisheries. With a market-driven approach, the company aims to contribute to the advancement of the aquaculture industry by realizing highly efficient, environmentally low-impact aquaculture systems.

While land-based aquaculture—especially Recirculating Aquaculture Systems (RAS)—offers effective use of water resources and reduced disease risk, it also presents challenges such as high initial investment and operating costs. Existing sterilization and water purification systems often involve large-scale equipment, complex piping, and labor-intensive maintenance, contributing to increased costs.

Against this backdrop, Far-UVC (wavelength 222nm) irradiation technology from BEAM Technologies has been introduced on a trial basis at Kamome Mirai Suisan's advanced aquaculture facility in Fukushima. Far-UVC is known for its powerful sterilization effects while being safer for living organisms compared to traditional UV-C technologies.

By applying this technology directly inside the tanks, it is expected to simplify part of the existing complex water treatment system, contributing to reduced capital and operational costs.



一般的なRASシステム





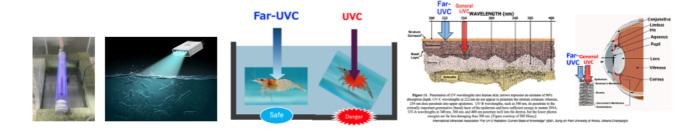
提案する新たなRASシステム

## **About Direct Sterilization Using Far-UVC**

Direct sterilization with Far-UVC efficiently eliminates pathogens in aquaculture water, helping to establish a healthier rearing environment. This leads to enhanced growth of aquatic organisms, reduced disease risk, and ultimately increased productivity.

This initiative marks an important step toward addressing the cost challenges of land-based aquaculture systems and accelerating their adoption. Through this trial implementation, BEAM Technologies will evaluate the specific effects of Far-UVC technology on RAS systems and work to optimize it.

We are committed to contributing to the realization of a sustainable, highly efficient, and cost-effective next-generation land-based aquaculture system—bringing innovation to the future of the fisheries industry.



### **Company Profiles**

#### About Kamome Mirai Fisheries Co., Ltd.

Headquartered in Fukushima Prefecture, Kamome Mirai Suisan is developing land-based aquaculture operations using the latest technologies, aiming to provide a stable supply of high-quality seafood. The company is dedicated to building sustainable aquaculture systems with minimal environmental impact.



#### About BEAM Technologies Inc.

A startup from RIKEN based on semiconductor crystal growth technologies. BEAM Technologies aims to solve ecological challenges through Far-UVC technology utilizing next-generation AlGaN semiconductors

Website: <a href="https://beam-tec.jp/">https://beam-tec.jp/</a>

