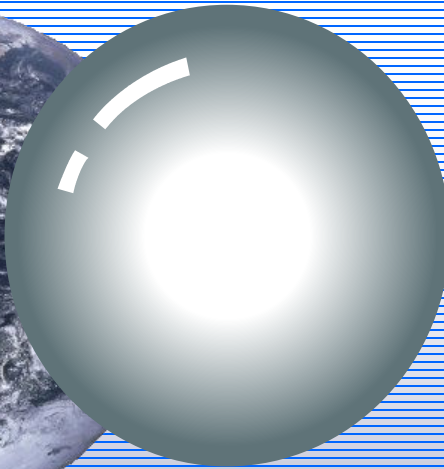
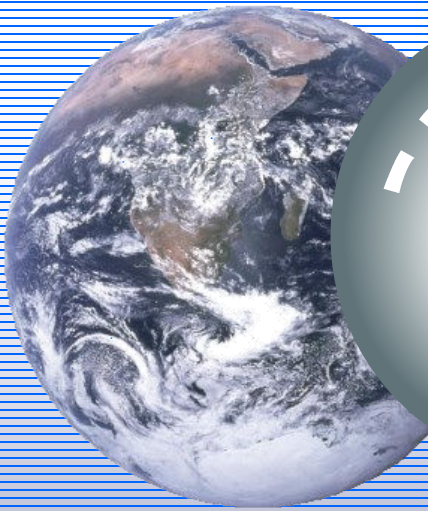


# Environmental Balance Device® Technology

## Aquaculture Farming Series



Ozone Layer  
Depletion

CO2

4300 Biscayne Blvd, Suite 101 • Miami, Florida 33137 U.S.A.  
Tel. +1(305)372-1104 • Fax +1(305)328-9312 • Web: [freytech.com](http://freytech.com)  
**Remediation: Air, Water and Soil**

Acid Rain

Global  
Warming

Dioxins

Desertification

Abnormal  
Weather

Marine  
Pollution

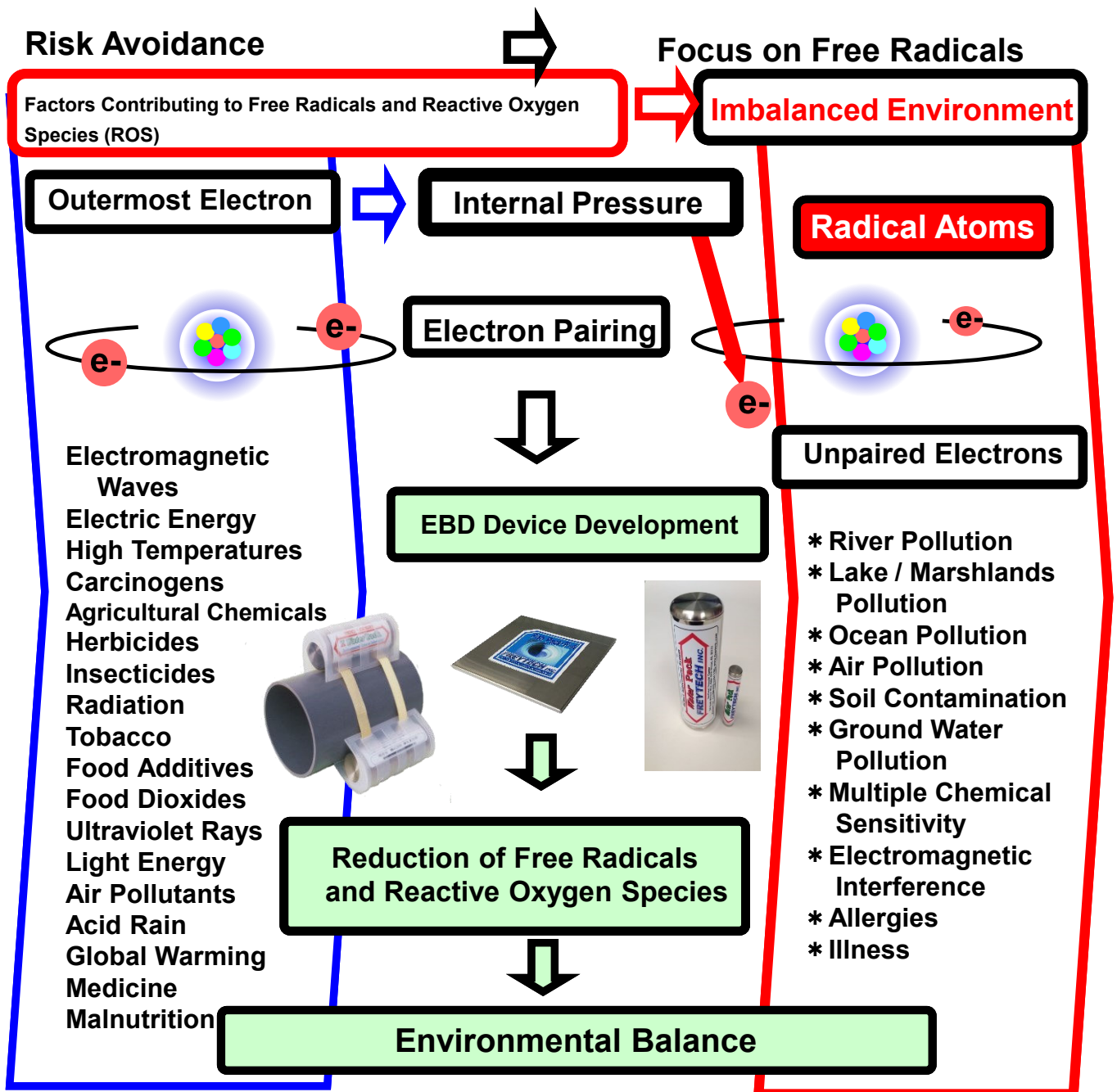
## EBD Technical Summary for Aquaculture Applications

It is well established that the iron mass present at the core of our planet, generates a negative (-) charge and that this charge is balanced at the earth's surface when it comes into contact with the positive (+) charge emanating from our upper atmosphere. Pollution in air, water and soil however, creates an imbalance resulting, more often than not, in the presence of an excessive amount of negative (-) charge. This excess negative charge, causes one of the two oxygen ( $O_2$ ) electrons in the oxygen molecule to spin off, thus creating high concentrations of "Reactive Oxygen Species" (ROS), a strong oxidizer which kills microorganisms. The presence of ROS, impedes microbial life from maintaining balanced population densities and varieties. A balanced Higgs Boson particle state (balance between negative (-) and positive (+) energy), must be achieved, to allow microorganisms to metabolize & replicate effectively, thus enabling them to absorb, digest, secrete, excrete and decompose pollutants.

By installing Freytech Inc. compact EBD devices around the perimeter of the area to be treated/remediated, a balanced energy state is emulated, causing ROS electrons to pair up with each other, thus greatly improving the quality of the existing oxygen. In such a balanced environment, indigenous microorganisms replicate exponentially and fully remediate the organic as well as inorganic pollutants present.

This novel and cutting edge technology has been thoroughly tested, demonstrated, quantified and analyzed by independent laboratories. EBD technology has numerous applications, including aquaculture water treatment, remediation of rivers, lakes (including their beds), ground water, algae, agricultural run-off as well as contaminated soil (including petroleum & its derivatives). EBD fully remediates heavy metals including, but not limited to, Chromium 6, Mercury, Arsenic, Lead, Zinc, Selenium, Cobalt, Nickel, Copper, Silver, Cadmium, Antimony, Thallium compounds etc. EBD also remediates PCB's.

This non-intrusive and most affordable EBD remediation system has no power requirements and has an exceptionally long service life. In addition, it does not introduce any chemicals, heavy metals nor materials of any kind (biological or otherwise) into the environment.



# Aquaculture Problems



**Fish Farm**



**Fish Farm Water Quality**



**Feed Additive Dosages**

**Assorted Feed Residue Accumulation**

**Natural Disasters**



**Excessive Feed Dosification**

**Aquatic Life Disease**



**Excrement Accumulation**

**Decrease in Dissolved Oxygen**

**Assorted Feed Dosage**



**Aquatic Chemical Dosification**

**Confined Areas**



**Lack of Oxygen**



**Red Tide**

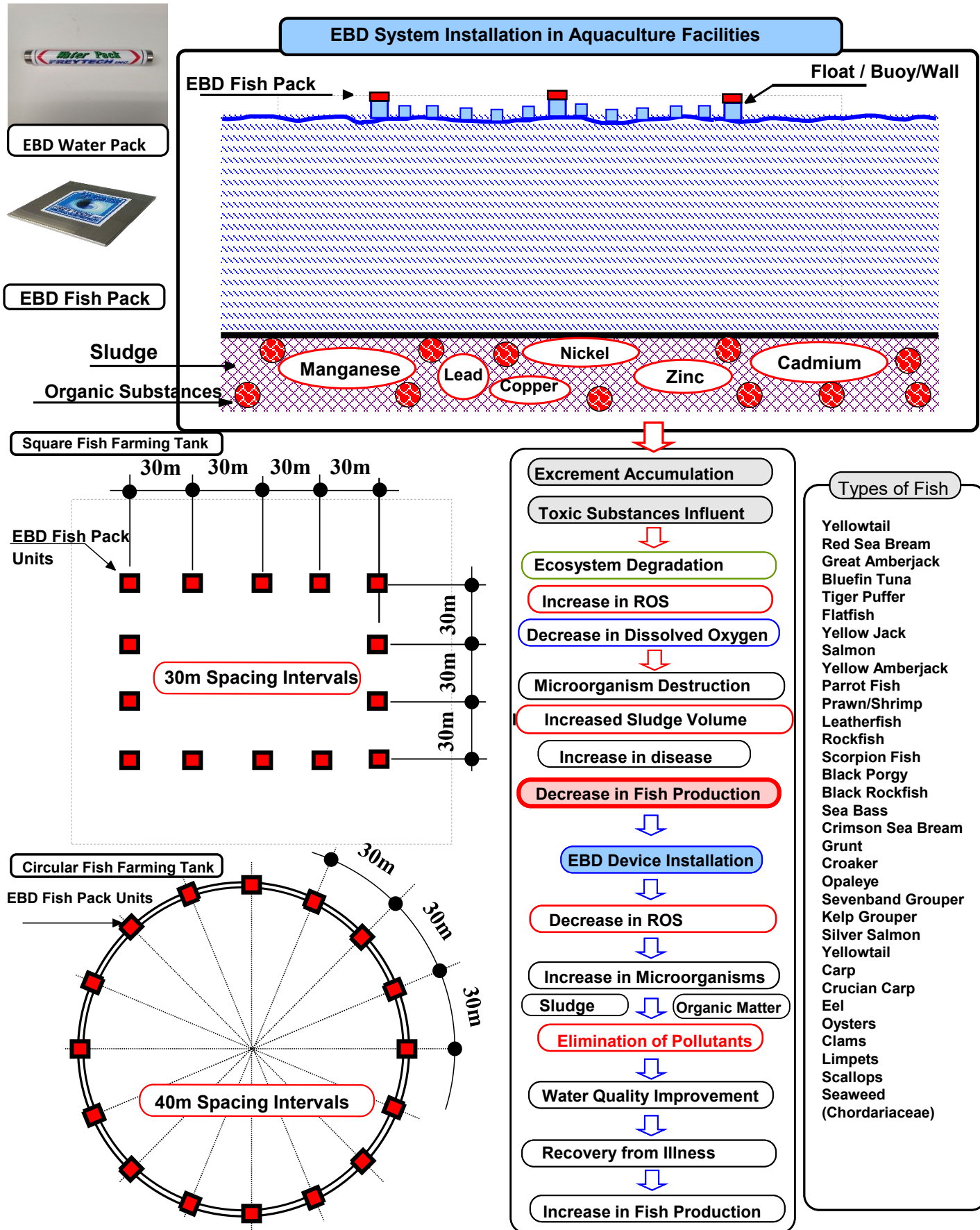


**Blue Tide**

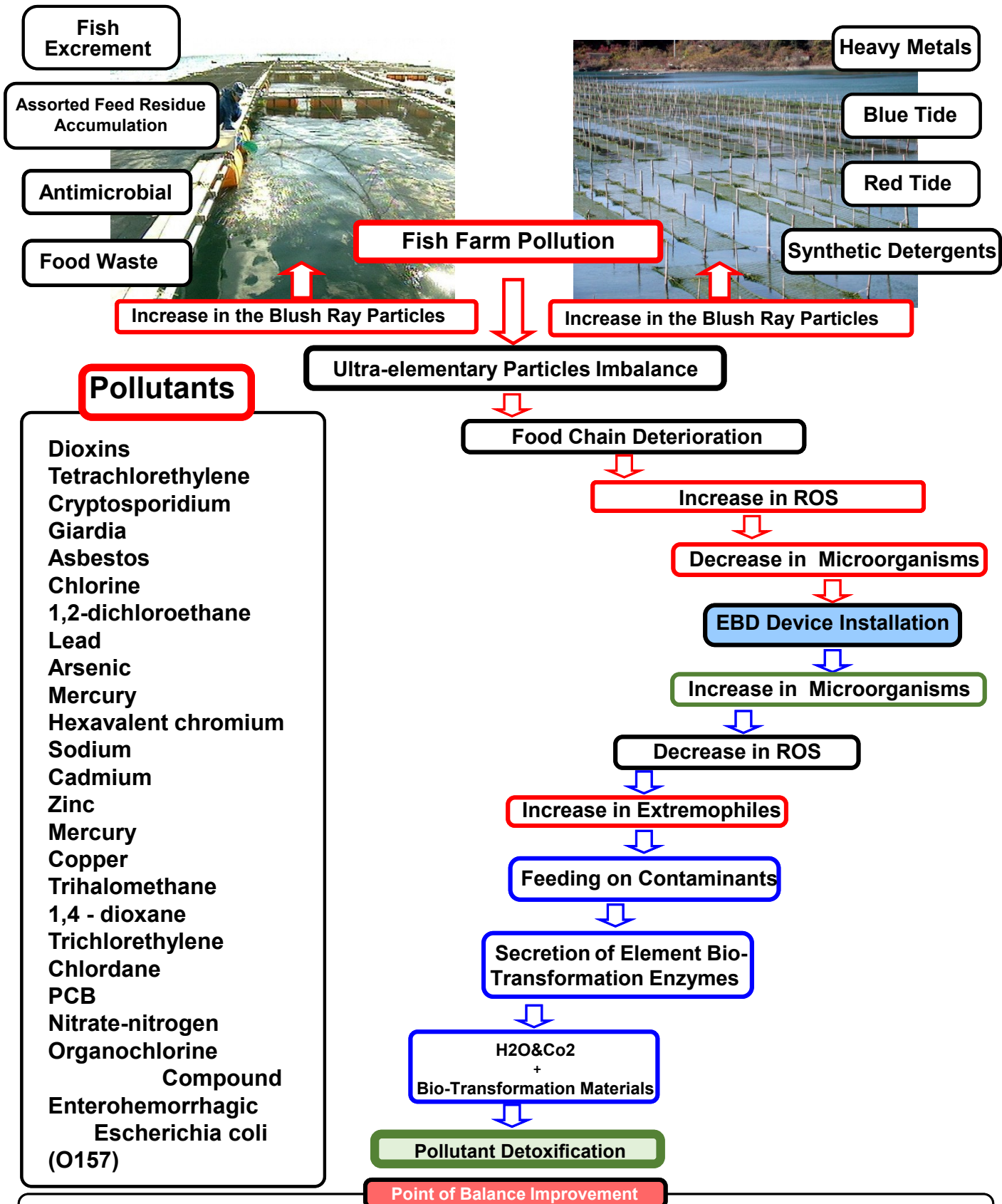


# EBD Treatment in Fish Farming Applications

The gradual accumulation of excrement and residual substances at aquaculture facilities, causes a decrease in dissolved oxygen concentrations. In addition, these conditions create a lot of stress for the fish which in turn also negatively affects the growth cycle, quality as well as taste of the end product. By placing Freytech EBD Fish Pack Units around the perimeter of the fish tank, they cause reactive oxygen species (ROS) electrons to pair up together and convert to  $O_2$ . Consistent oxygen rich conditions, will ensure a healthy environment for the fish, shrimp, oysters, mussels, etc. In addition, sea lice and algae concentrations will decrease significantly.



# EBD Pollution Treatment Mechanisms



\*Producing a balanced environment, leads to a decrease of free radical reactions. This leads to dramatic indigenous microbial activation which in turn leads to the decomposition of organic and inorganic substances in the fish containment areas for both "onshore" as well as "offshore" aquafarm locations.

\* Within one month of EBD installation, a Balanced state will be created throughout the fish containment area and it will no longer be necessary to use antibiotics, pesticides, disinfectants, hormone drugs, or vitamin compounds.

\*Once EBD Balance is realized, the incidence of carcinogenicity and re-deformity will drastically decrease and resistant bacteria as well as sea lice will be brought under control.

\* Once EBD Balance is realized, chemical use will no longer be required. Fish yields will increase and the quality and taste of the fish product will notably improve. Aquaculture operational costs will thereby be significantly reduced.

# EBD Fish Pack Installation Instructions

## A) INSTRUCTIONS FOR OUTDOOR INGROUND AQUACULTURE PONDS

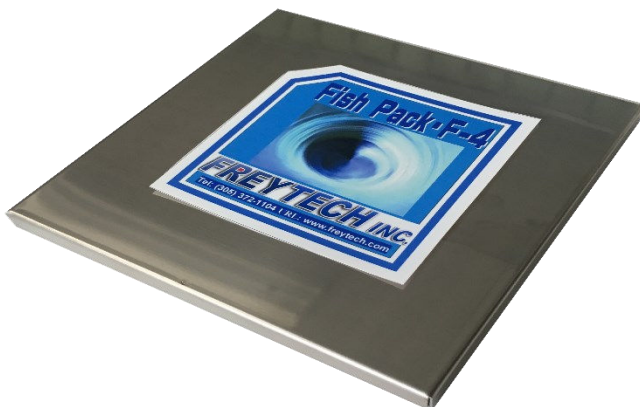
- 1) Dig one 15 cm deep small hole at every 30 meter interval around the outer land perimeter of the pond. Dig hole on dry land within 2 meters to the water's edge. Ensure that any potential soil erosion will not affect the installation location. Each hole should have the same depth. If the fish pond is square or rectangular in shape, ensure that you have one EBD Fish Pack buried on each corner and at every 30 meter interval in between.
- 2) Place one EBD Fish Pack **HORIZONTALLY** at the bottom of each hole with the Freytech label face up. Do NOT install vertically.
- 3) Gently refill hole with soil by hand ensuring that the EBD Fish Pack remains in its horizontal position. Ensure the EBD Fish Pack unit is completely buried underground.
- 4) Avoid exposure to UV Rays (sunlight) on EBD Fish Pack units during the installation process.

## B) INSTRUCTIONS FOR INDOOR ABOVE GROUND AQUACULTURE RACEWAYS

- 1) Completely cover and wrap each EBD Fish Pack unit with thermal insulation material (not included) to prevent exposure to excessive heat (80 C. maximum) and UV rays / sunlight.
- 2) Place one EBD Fish Pack **HORIZONTALLY** on top of the raceway wall ledge with the Freytech label face up at every 30 meter interval. Do not install vertically.
- 3) Firmly secure insulated EBD Fish Pack units to top of raceway wall ledge using water proof duct tape. Completely cover the unit with ample amounts of tape to ensure a permanent installation.

## C) INSTRUCTIONS FOR OFFSHORE (OPEN OCEAN) AQUACULTURE SITES USING FISH CAGES

- 1) Completely cover and securely wrap each EBD Fish Pack unit with thermal insulation material (not included) to prevent exposure to excessive heat (80 C. maximum) and UV rays / sunlight.
- 2) Place one EBD Fish Pack **HORIZONTALLY** on top of the Fish Cage wall surface with the Freytech label face up at every 30 meter interval. Do not install vertically. If the site employs floating buoys instead of fish cages, install EBD Fish Packs on floating buoys.
- 3) Firmly secure insulated EBD Fish Pack units to top surface of the Fish Cage above the water level surface using plastic zip ties. Ensure that EBD Fish Packs are very well secured and will not become dislodged by ocean waves, wind etc.



**EBD Fish Pack**  
**11 cm x 11 cm x 1 cm**

# EBD Water Pack (L) Installation Instructions

Each pump supplying fresh water to each raceway/ pond requires EBD Water Pack (L) units be attached to the discharge pipe. Water Pack (L) units greatly improve the quality of the water which in turn benefits the fish / shrimp.

The number of Water Pack (L) units required, depends on the diameter size of the pump discharge pipe. The bigger the diameter of the pipe, the higher the number of Water Pack (L) units required. Following, is a chart reflecting EBD Water Pack Selection According to Pump Discharge Pipe Diameter. If your discharge pipe is greater than 125 mm (5 inches), please contact Freytech Inc. for instructions regarding how many EBD Water Pack (L) units are required.

| Discharge Pump Pipe mm | Discharge Pump Pipe Inch | EBD Water Pack Devices For Water Under 80°C in Temperature |
|------------------------|--------------------------|------------------------------------------------------------|
| 15                     | 1/2                      | 1 (Water Pack S)                                           |
| 20                     | 3/4                      | 1 (Water Pack S)                                           |
| 25                     | 1                        | 1 (Water Pack S)                                           |
| 32                     | 3                        | 1 (Water Pack L)                                           |
| 40                     | 1×3/4                    | 1 (Water Pack L)                                           |
| 50                     | 2                        | 2 (Water Pack L)                                           |
| 65                     | 2×1/2                    | 2 (Water Pack L)                                           |
| 80                     | 3                        | 3 (Water Pack L)                                           |
| 90                     | 3×1/2                    | 3 (Water Pack L)                                           |
| 100                    | 4                        | 4 (Water Pack L)                                           |
| 125                    | 5                        | 4 (Water Pack L)                                           |



**EBD Water Pack (L)**

**11 cm x 4.5 cm**