

# **RGF**<sup>®</sup> **BOS-HOX** **ENVIRONMENTAL**

## **Advanced Oxidation Process for Compactor / Dumpster / Waste Storage Area/Lift Station Bacteria & Odor Abatement System**



**RGF'S BACTERIA / ODOR ABATEMENT SYSTEM  
- FOR -  
LIFT STATIONS, DUMPSTERS, FOOD PROCESSING,  
RESTAURANTS, HOTELS, NURSING HOMES, RECYCLE  
CENTERS, FAST FOOD, SUPERMARKETS, LAUNDRIES...  
just to name a few.**

RGF has been an International leader in innovative environmental systems since 1985

Fully automatic, easy to use and install, versatile and portable

No costly and complicated chemicals

Leaves no residue / operates unattended

BOS uses Photohydroionization<sup>®</sup>, nature's natural deodorizer, environmentally friendly

Low power consumption, 110 or 220 volt

Low maintenance - only one filter to clean yearly cell replacement

10,000 hours average Photohydroionization<sup>®</sup> Cell life

Advanced Oxidation gases actually destroys odor molecules, it is not a cover-up

Photohydroionization<sup>®</sup> destroys bacteria, mold, organic pollutants and odors

## **THE RGF BOS PHOTOHYDROIONIZATION<sup>®</sup> MODULE WILL DESTROY, NOT JUST COVER-UP, THE FOLLOWING AIRBORNE SUBSTANCES:**

- DECOMPOSING ORGANICS
- SMOKE
- MOLD & MILDEW
- BACTERIA
- ALGAE
- URINE / FECES
- CHEMICAL FUMES

- FUNGUS
- YEAST
- POLLEN
- HYDROCARBONS
- KETONES
- SPORES
- VOC's

**THE RGF BOS SYSTEM OF LOW COST ADVANCED OXIDATION PRODUCTION IS DESIGNED TO PROVIDE COMMERCIAL AIRBORNE BACTERIA AND ODOR DESTRUCTION**

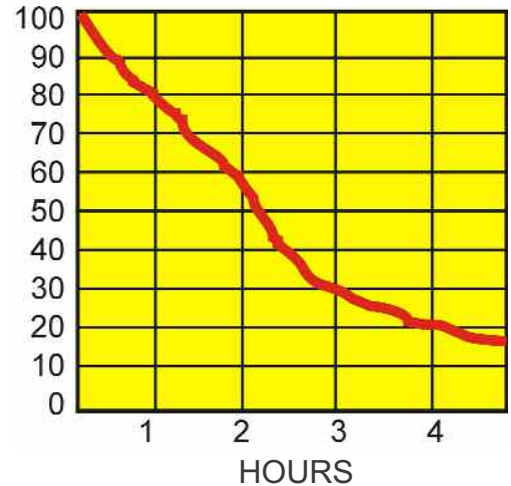
**Lab Results**



Before and after bacteria samples application of BOS unit to commercial dumpster compactor

\* Independent Lab data available

Odor reduction (Hydrogen Sulfide)



**Outstanding Features**

- No Costly Chemicals
- All stainless steel
- Automatic Unattended Operation
- Safety Service Cut Off Switch
- Hour meter / On off indicator light
- Destroys Odors - Is Not a Cover Up
- High Capacity Blower
- Low Maintenance
- Reduces Fly Infestation
- Reduces airborne bacteria
- Reduces liability
- Eliminates odors

**Specifications**

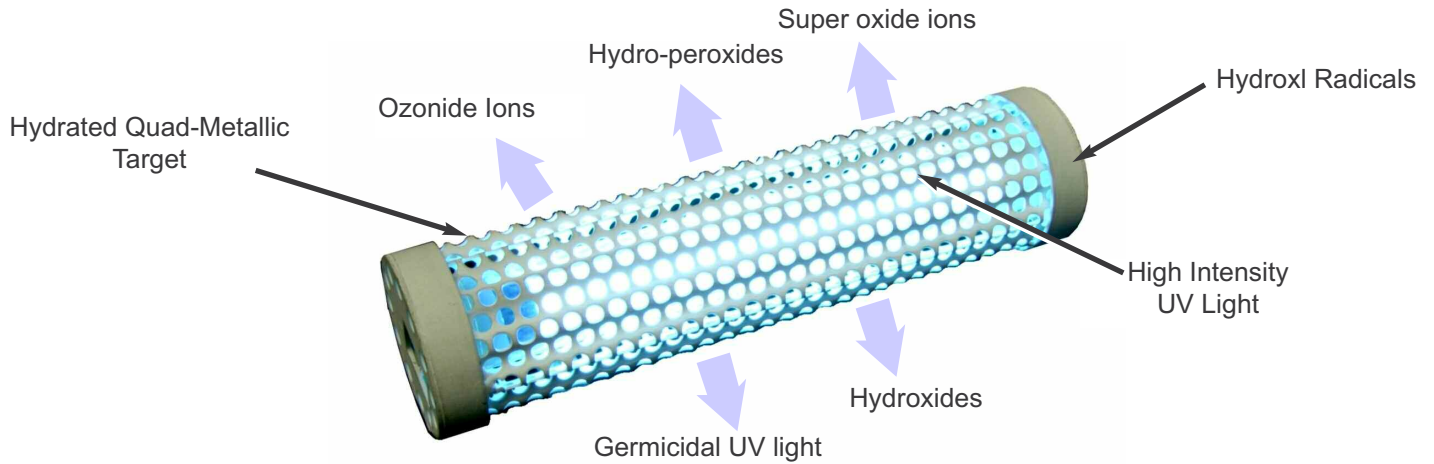
MODELS	BOS-HOX
VOLTAGE	110V 60Hz LOW 1.36 A HIGH 2.17A / 220V 50/60 Hz LOW 0.68A HIGH 1.09A
WEIGHT	20 LBS.
MATERIAL	STAINLESS STEEL
DIMENSIONS	25" x 10" x 18"
HOSE	2.5" DIA x 8' L
CONTROLS	ON/OFF HIGH/LOW (Six cells on high setting - three cells on low setting)
FAN VOLUME	100 CFM
NUMBER OF PHI CELLS	SIX (6)
PHI CELL LIFE	APPROX. 10,000 HOURS
OXIDATION GASES	HYDRO PEROXIDES, OZONE, SUPER OXIDE IONS, OZONIDE IONS

**The Benefits**

The Advanced Oxidation gas created by the RGF Photohydroionization® Cell are safe environmentally friendly oxidizers that revert back to oxygen and hydrogen. The RGF - BOS utilizes ozone to create hydroperoxides, oxide ions, ozonide ions and hydroxides. The ozone produced is a safe low concentration, produced by a targeted high intensity UV light technology. This method is far safer than the traditional ozone generators. Targeted UV ozone generators do not produce nitric oxide gas or nitric acid and they have a very high efficiency rating. The additional oxidizers provides a broader range of applications and redundant oxidation gases.

## The Physics of RGF's Proprietary Photohydroionization®

A high intensity UV light targeted on a hydrated Quad-Metallic target in a ozone atmosphere thereby creating Ozone, Hydroperoxides, Super Oxide ions, Hydroxides and Ozonide ions. All are very aggressive friendly gaseous oxidizers. By friendly we mean oxidizers that revert back to oxygen and hydrogen after they oxidize the organics, bacteria, odor or gases.



RGF Photohydroionization® Cell

Patent Pending

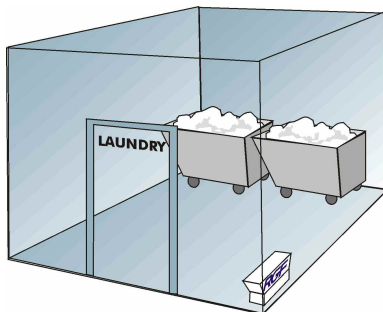
## APPLICATIONS



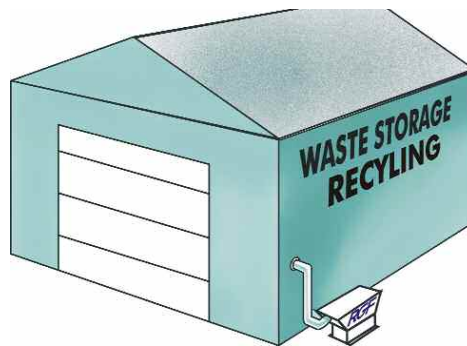
Dumpster / Compactor Odor and Airborne Bacteria control



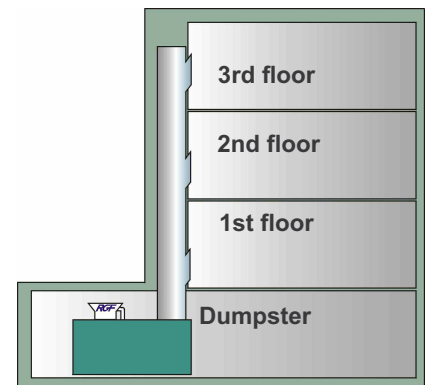
Lift Station Odor and Airborne Bacteria control



Laundry storage rooms airborne bacteria and odor control



Waste / recycling storage rooms airborne bacteria and odor control



High rise trash drop airborne bacteria and odor control

# About RGF



Customer Service Award.

## Innovation

Since 1985 RGF has maintained a steady flow of award winning innovative purification products. RGF has been awarded national recognition as a recipient of the Inc./MCI



design, and environmental law. Our 3D printers give us rapid design ability.

## Design

Our R&D technical staff consists of the following specialists: Advanced oxidation, biological, mechanical, chemical, water treatment engineering, electrical, nuclear, fabrication,

## Patented Technology

RGF has been a leader in patented Environmental sanitation / purification technology and products for air, food and water.



## Lab

RGF maintains four fully equipped labs. R&D - Mechanical, Electrical (UL approved), R&D Food and a wet lab.



## Manufacturing

RGF is a fully vertical manufacturer. Our 100,000 square foot facility has electrical/mechanical assembly, injection molding, assembly line, custom engineering, welding, painting, mold

making, machining and marine fabrication



RGF manufactures over 500 environmental products

## Validation

RGF first developed its Advanced Oxidation Technology over 20 years ago. Over 1 million RGF Cells are in use around the world. RGF has licensed its technology to many Fortune 500 companies for use in the medical, food, military, residential, commercial, marine, hospitality and government, etc.



## R & D

RGF maintains a Research and Development staff that is involved in EPA / USDA / FDA / EPRI and University Environmental Studies. Our staff continuously develops system improvements and new products. RGF personnel have been published in over 70 national journals and textbooks.



## Custom Applications & Components

RGF's award winning engineering team custom designs systems for air, food, water and marine purification technology and products



## Advanced Oxidation

RGF has been a leader in Advanced Oxidation technology since 1985. We developed an advanced catalytic oxidation system for total organic oxidation. Our Photohydroionization process has been approved by the USDA / FDA / FSIS for food processing and air purification systems.



## Envision

The "World's First Environmentally Friendly Mega Yacht" serves as a working showroom for RGF's Advanced Oxidation products. Envision uses and displays over 50 RGF products.



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