Manufacturer of Air Knights' PHI Cell Teams with Homeland Security & Center for Disease Control

RGF Environmental Group's key personnel have a long history of U.S. Government Service. Over RGF's 25-year history, the company has equipment in every branch of the military and every national test facility and lab. More recently, RGF has been involved with Homeland Security. The following is a brief summary of RGF's, Homeland Security and the Center for Disease Control's roles:

2001 – Just weeks after 9/11, RGF was invited to a Security Intelligence briefing in Washington by the Association for Intelligence Officers on "What we know and what we don't know."

2001 – Anthrax Scare – RGF is on the evening news with its PHI Food Sanitation Hood's ability to kill Anthrax on mail for the U.S. Postal Service.

2002 – RGF successfully demonstrated its Advanced Oxidation Technology to Sandia National Labs, Kansas State University and Homeland Security to protect against a Bio-Terrorism attack on aircraft.

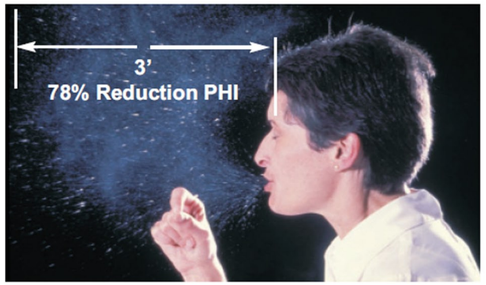
2003 – SARS Scare – RGF is on the evening news and in the press with the ability of PHI to kill the deadly SARS Virus. The Chinese Government tests PHI and ordered thousands of units for subways and buses.

2009 – RGF is working with the Center for Disease Control (CDC) on the use of REME on Norwalk Virus outbreaks based on our Midwest Research Institute testing and our flawless cruise ship record!

2009 – RGF is appointed to Homeland Security Nuclear, Biological and Chemical Terrorism Task Force. RGF's role is to develop terrorism scenarios and develop practical technology and devices to counter nuclear, biological or chemical terrorism. Our role will also encompass educating first responders nationwide. RGF's REME Technology is being field tested at this time.

Sneeze Test - Air Knight PHI

A testing protocol concept was used which included a "Sneeze Simulation Machine" and "Sneeze" chamber. A sneeze can travel at up to 100 mph, so we had to consider lung capacity, sneeze pressure, and liquid volume to properly simulate a human sneeze. This was accomplished and the test proceeded with outstanding results. An average of 78% reduction of microbials was achieved with PHI in a double blind test, at 3 feet from the sneeze source. This is clearly not a medically supervised test or protocol. However, from a practical point, it was definitely providing some kill at the source and will provide some level of protection.



Simulated Sneeze Lab Test at three feet in a 250 cu ft Bio Test Chamber. An independent PE double blind study.

SAFETY

It is a normal reaction to question the long term safety of any product that is effective and uses new or "breakthrough" technology. This type of question has become common as our litigious society has taught us to question things that significantly outperform existing methods or products.

The RGF *advanced oxidation technologies* that produced the results found on the pages of this report certainly fall into the category of breakthrough technology. This is evident by its outstanding test results across the entire range of microbes.

The breakthrough in the RGF *advanced oxidation technologies* is not found in the final product (hydroperoxides) but rather in the method by which they are produced. The active ingredient created by the RGF products is a group of oxidants known as Hydroperoxides. Hydroperoxides have been a common part of our environment for over 3.5 billion years. Hydroperoxides are created in our atmosphere whenever three components are present: unstable oxygen molecules, water vapor and energy (electro magnetic).

Hydroperoxides are very effective (as demonstrated by the test results in this book) at destroying harmful microbials. As oxidants, they do this by either destroying the microbe through a process known as cell lysing or by changing its molecular structure and rendering it harmless (which is the case in VOC's and odors). The amount of hydroperoxides required to accomplish this task in a conditioned space is well below the level that is constantly in our outside air. The advanced oxidation technology found in RGF's Guardian Air product family has brought the oxidants found in the outside air into the conditioned space.

There is no known case of hydroperoxides ever creating a health risk. Considering we have been exposed to hydroperoxides in nature since the day man stepped on the planet, it is a reasonable assumption that hydroperoxides do not constitute a health risk. Over the past 20 plus years RGF has more than 1 million Advanced Oxidation products successfully used worldwide.

Air Knight PHI Cell
An RGF Advanced Oxidation Technology
Effective on gases, odors and microbials

Disclaimer:
All the above tests were performed on RGF Advanced Oxidation products with Advanced Oxidation Plasma of less than .02 ppm. They were conducted by independent accredited labs and university studies. They were funded and conducted by RGF's major clients to assure third party credibility. RGF products are not medical devices and no medical claims are made.

Air Knight by TopTech
2000 Parks Oaks Ave.
Orlando, Florida 32808

Air Knight

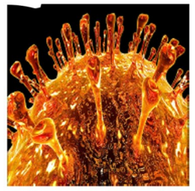
PHI Air Purification System

ADVANCED OXIDATION TEST RESULTS 2000-2009

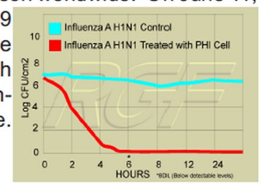
RGF first developed its Advanced Oxidation Technology over 20 years ago. Over 1 million RGF Cells are in use around the world. RGF has licensed its technology to many Fortune 500 companies for use in the medical, food, military, residential, commercial, marine, hospitality and government, etc. RGF cells in various products have been tested and/or approved or registered by:

- •UL, ETL, TUV, EU, EPA & CSA
- •U.S. Military
- •Electric Power Research Institute
- •Chinese Government
- •Japanese Government (TV commercials)
- •Canadian Government
- •U.S. Government – GSA
- •European Union
- •USDA & FSIS

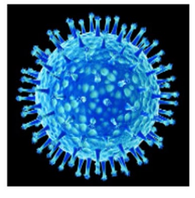
In addition, RGF cells have been specified in the Norovirus & MRSA protection plan of America's largest restaurant chains, hotel chains, theme parks, cruise lines, public schools and hospitals. The following is a summary of some of the testing and studies performed by third party independent labs and universities. RGF products are not medical devices and no medical claims are made.



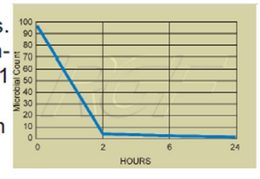
H1N1 (Swine Flu)
Kansas State University has completed preliminary testing on RGF's Photohydroionization (PHI-Cell®) and Reflective Electromagnetic Energy (REME® Cell) technologies with **99+% inactivation of H1N1 Swine Flu on a stainless steel surface.** Further tests are scheduled. 2009 H1N1 (referred to as "swine flu" early on) is a new influenza virus causing illness in people. This new virus was first detected in people in the United States in April 2009. This virus is spreading from person-to-person worldwide. On June 11, 2009, the World Health Organization (WHO) signaled that a pandemic of 2009 H1N1 flu was underway. Spread of 2009 H1N1 virus is thought to occur in the same way that seasonal flu spreads. Flu viruses are spread mainly from person to person through coughing or sneezing by people with influenza. Sometimes people may become infected by touching items – such as a surface or object – with flu viruses on it and then touching their mouth or nose.



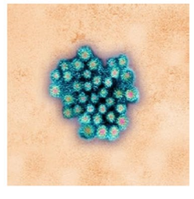
Tested by Kansas State University Inactivation Rate **99+%**



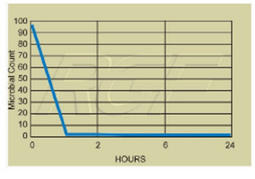
Avian influenza (Bird Flu)
Avian influenza is an infection caused by avian (bird) influenza (flu) viruses. These influenza viruses occur naturally among birds. Of the few avian influenza viruses that have crossed the species barrier to infect humans, H5N1 has had the largest number of detected cases of severe disease and death in humans. Source:CDC: Center for Disease Control and Prevention



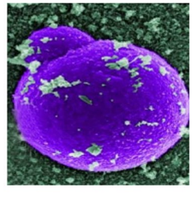
Tested by Kansas State University Inactivation Rate **99+%**



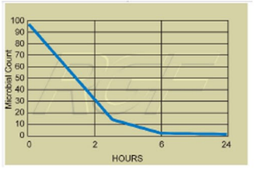
Norwalk Virus
Noroviruses are a group of related, single-stranded RNA, nonenveloped viruses that cause acute gastroenteritis in humans. Noroviruses are highly contagious and as few as 10 viral particles may be sufficient to infect an individual. 50% of all food-borne outbreaks of gastroenteritis can be attributed to noroviruses Source: CDC-Centers for Disease Control and Prevention



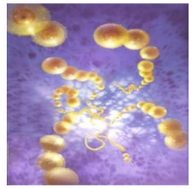
Tested by Midwest Research Institute Inactivation Rate **99+%**



Methicillin Resistant *Staphylococcus aureus*
Methicillin-resistant *Staphylococcus aureus* (MRSA) is a type of bacteria that is resistant to certain antibiotics. These antibiotics include methicillin and other more common antibiotics such as oxacillin, penicillin and amoxicillin.
Source: CDC Centers for Disease Control and Prevention



Tested by Kansas State University Inactivation Rate **99+%**



Streptococcus Sp.

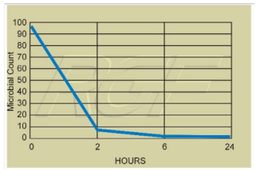
Group *A Streptococcal* (strep) infections are caused by group *A streptococcus*, a bacterium responsible for a variety of health problems.
Source: U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Tested by Kansas State University Inactivation Rate **96+%**

Pseudomonas Sp.

The bacterial genus *Pseudomonas* includes plant pathogenic bacteria such as *P. syringae*, the opportunistic human pathogen *P. aeruginosa*, the ubiquitous soil bacterium *P. putida*, and some species that are known to cause spoilage of unpasteurised milk and other dairy products.

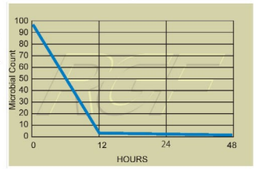
Tested by Kansas State University Inactivation Rate **99+%**



Listeria

This is a Gram-positive bacterium, motile by means of flagella. Some studies suggest that 1-10% of humans may be intestinal carriers of *L. monocytogenes.*
Source: U.S. Food and Drug Administration

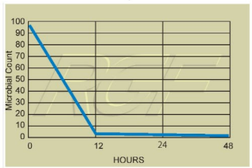
Tested by Kansas State University
Steris Labs
KAG / Eco Labs
Inactivation Rate **99+%**

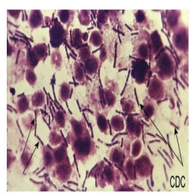


Escherichia coli

Escherichia coli, usually abbreviated to *E. coli,* discovered by Theodor Escherich, a German pediatrician and bacteriologist, is one of the main species of bacteria that live in the lower intestines of mammals, known as gut flora.
Source: CDC: Center for Disease Control and Prevention

Tested by Kansas State University Inactivation Rate **99+%**

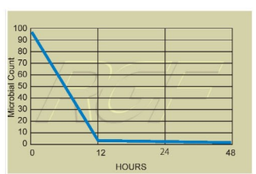




Bacillius Globigii

Bacillus globigii lives in soils around the world and can readily be found in samplings of wind-borne dust particles. It is also known as *Bacillus subtilis*, its more modern name.
Information source: CDC (Center for Disease Control) and Los Alamos National Laboratory

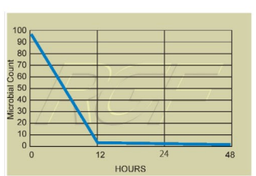
Tested by Kansas State University Inactivation Rate **99+%**

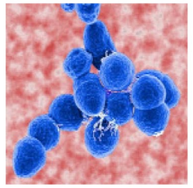


Staphylococcus Aureus

Staphylococcus aureus, often referred to simply as "staph," is a bacteria commonly found on the skin and in the nose of people. Person-to-person transmission is the usual form of spread and occurs through contact with secretions from infected skin lesions, nasal discharge or spread via the hands.
Information source: CDC (Center for Disease Control) and FDA (Food and Drug Administration)

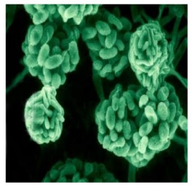
Tested by Kansas State University Inactivation Rate **99+%**





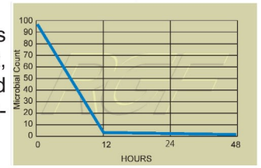
Streptococcus Pneumoniae

S. pneumoniae is an exclusively human pathogen and is spread from person-to-person by respiratory droplets, meaning that transmission generally occurs during coughing or sneezing to others within 6 feet of the carrier. Health experts estimate that more than 10 million mild infections (throat and skin) like these occur every year.
Information source: CDC (Centers for Disease Control)
Tested by Kansas State University Inactivation Rate **99+%**



Stachybotrys chartarum

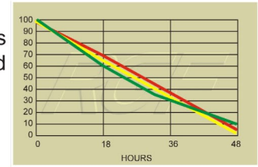
Stachybotrys is a greenish-black fungus found worldwide that colonizes particularly well in high-cellular material, such as straw, hay, paper, dust, lint, and cellulose-containing building materials such as fiber board and gypsum board that become chronically moist or water damage due to excessive humidity, water leaks, condensation or flooding.
Source: Health and Industry
Tested by Kansas State University Inactivation Rate **99+%**

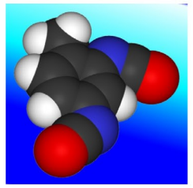


Mold/Yeast

The purpose of this test was to evaluate the effect the RGF AOT unit has on mold/yeast bacteria (TPC). This test was performed utilizing a standard 2000 sq. ft. home and 3000 sq. ft. simulated home.
Tested by California Microbiology Center

Reduction %
Bacteria **99%** Mold **97- 98%** Yeast **90+%**





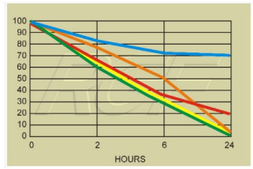
Chemical Compounds

Gas Chromatograph/Mass Spectrometer test performed by Nelap Accredited Lab on airborne chemical compound reduction using RGF's AOT.

Hydrogen Sulfide - Rotten eggs
Methyl mercaptan - Rotten cabbage
Carbon Disulfide - Vegetable sulfide
Butyl Acetate - Sweet banana
Methyl Metharcyline - Plastic

Tested by GC/MS Nelap Accredited Independent Lab

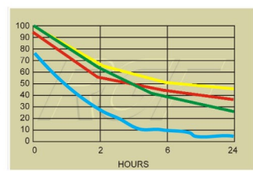
Reduction %
Hydrogen Sulfide **80%** Methyl mercaptan **100%** Carbon Disulfide **30%** Butyl Acetate **100%** Methyl Metharcyline **100%**

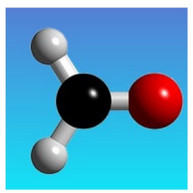


Odors

The purpose of this test was to evaluate to what effect the RGF's AOT unit has on cleaning chemicals, pet odors, smoke and perfume odors. This test was performed utilizing two 500 cubic foot test chambers and a ten-person odor panel. The qualitative assessments of the ten-person odor panel were then used as a means to determine the odor reduction.
Tested by C&W Engineering (Independent PE Firm)

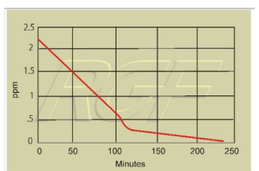
Reduction %
Cleaning chemicals **55+%** Pet odors **72%** Perfume odors **63+%** Smoke odors **70%**





Formaldehyde

The purpose of this test was to evaluate the effect the RGF AOT unit has on formaldehyde.
Tests were conducted in a Class II Bio test chamber by Kansas State University



Electrical / Ozone / EMF

All RGF AOP devices have been thouroghly tested for electrical safety, ozone / emf - Electro Magnetic Frequency and have passed Federal Safety Standards.
Tested by: TUV, ETL, UL, CSA, NEI China, RGF Labs. The Japanese Government, GSA, Electrical Power Research Institute.
Note: Many household appliances emit some ozone and emf in safe low levels such as and fluorescent lights, motors, computers, copy machines, refrigerators, blenders,electronic air filters, air conditioners, electric fans, microwave ovens, etc.