

49. **QUESTION:**
What are the various oxidizers in order of strength?
- ANSWER:**
(1)Fluorine, (6) Chlorine
(2)Hydroxyl Radical* (7)Bromine
(3)Ozone (8)Iodine
(4)Hydrogen Peroxide* (9)Oxygen*
(5)Permanganate
(*=described as friendly oxidizers)
50. **QUESTION:**
What do you mean by "friendly oxidizers"?
- ANSWER:**
These are oxidizers that are based on oxygen and hydrogen and revert back to harmless carbon dioxide and water after they oxidize. No chemicals are involved.
51. **QUESTION:**
Does the RGF PHI System produce ions?
- ANSWER:**
Yes, low levels of ions
52. **QUESTION:**
Does the RGF PHI System use germicidal UV rays?
- ANSWER:**
Yes.
53. **QUESTION:**
What applications is the RGF PHI Air technology used in?
- ANSWER:**
Food Processing Plants Restaurants Vehicles
Medical Facilities Hotels Boats
Veterinary Offices Residences Food Stores
Offices Refrigerated Trucks
54. **QUESTION:**
Who owns RGF Environmental Group, Inc. & RGF Marine Environmental Systems, Inc.?
- ANSWER:**
Both are privately owned companies of which Ronald G. Fink, Founder, President & CEO, owns 100%. Hence the name RGF. As Ron always says: "With a name like "Fink", you cannot call the company Fink, Inc.!"
55. **QUESTION:**
Can I buy directly from RGF?
- ANSWER:**
No, RGF only sells through factory-trained authorized distributors who sell to licensed HVAC contractors to insure safe and professional installations.
56. **QUESTION:**
Is Guardian Air PHI an ozone device?
- ANSWER:**
No, it has been tested by ETL, TUV and numerous major USA companies for ozone levels and passed.
57. **QUESTION:**
Why is indoor Air Quality becoming such a big issue today?
- ANSWER:**
What most people don't know is that inside a home, school, hospital or business, the indoor air quality can be much worse than what is outside. Recently, the EPA and the U.S. Congress declared IAQ as the biggest single health risk to America. Americans, on the average, spend more than 90% of their time indoors where pollutant levels can be 2-5 times higher than outdoor levels. The air in even the cleanest homes can harbor dust, dirt, pollen, pet dander, mold and other airborne contaminants.
58. **QUESTION:**
What happened to cause such a problem with IAQ?
- ANSWER:**
Many different conditions have combined to cause today's indoor air crisis. The energy crisis of the 1970's saw us create buildings that didn't exchange air to the outside, this helped to save energy. Homes and buildings were made much more airtight and energy efficient. In addition, the materials of construction used in all forms of furnishings give off gases into the indoor and combine with other chemicals to create potential health risks. Also, from a medical perspective, we have truly become a global society. As a result, we are seeing viruses and mold strains from foreign lands mixing with our rather robust strains from America. These events and the deterioration of the overall outdoor air quality in the past 15 years have combined to create this legitimate health risk.
59. **QUESTION:**
How do the Guardian Air PHI products actually work?
- ANSWER:**
Guardian Air has developed a proprietary technology known as Photohydroionization or PHI technology. This technology creates an advanced oxidation reaction that eliminates odors, mold, viruses, bacteria and other pathogens without causing any harm to the occupants or the environment. Micro-organisms can be reduced by over 97%. This process features a broad spectrum UV light and a quad metallic target that combine to generate nature's friendly oxidizers: Hydroxides, Hydro-peroxides and Super Oxide Ions. These are called friendly oxidizers as they return to oxygen and hydrogen after making contact and destroying pathogens. They do not create chemicals that remain in the air, nor are they harmful to humans. The products can be installed in the ductwork of an air conditioning system or plugged into a common wall outlet.
60. **QUESTION:**
Are the Guardian Air products the same as UV lights now available in the HVAC industry?
- ANSWER:**
No. They are very different. First of all, the UV light used today in the industry is a specific use product. That is to say, it is used when mold is discovered on an air conditioning coil. The light is effective if it is positioned to shine directly on the mold for an extended amount of time. It does not affect pathogens (viruses, bacteria, mold) or gases (odors) that circulate in the air. It only affects pathogens if they come in very close contact to the light and have no effect on odors. The Guardian Air sends advanced oxidants throughout the house, via the duct system, to kill microbials and odors at the source, every time that the central air conditioning and heating blower operates. The Guardian Air also works for approximately 25,000 hours (3 years) compared to 8,000 hours (1 year) for the UV light.
61. **QUESTION:**
Is the Guardian Air product safe?
- ANSWER:**
Yes, they are safe both to people, pets and the environment. The photohydroionization process has been approved by the USDA-FDA-FSIS for food processing. This process produces Advanced Oxidation Plasma levels that are virtually undetectable at a very safe level of less than .02 ppm. This process produces no residual chemicals, just friendly oxidizers. They are also intrinsically safe. PHI technology utilizes low voltage current and the Guardian Air product uses proprietary protective covering (PPC) on the UV light portion of the PHI technology. This protects against an accidental spill of mercury in case of a broken light in the HVAC duct. The Guardian Air PPC light is unbreakable, and is ETL/TUV certified.
62. **QUESTION:**
How do the Guardian Air products help IAQ?
- ANSWER:**
The PHI technology creates three distinct effects that protect residents from poor indoor air quality:
Guardian Plasma System (GPS)
Provides a pro-active atmosphere of Advanced Oxidation Plasma for continuous protection from microbials and odors.
Mold Intervention System (MIS)
Kills airborne mold spores and mold odors.
Virus Interceptor System (VIS)
Kills viruses, even the stubborn SARS, Norwalk viruses and MRSA.
The Guardian Air kills both airborne, as well as surface borne microbials. No other product on the market can make that claim.
63. **QUESTION:**
Does the Guardian Air product leave a smell in the air?
- ANSWER:**
As a matter of fact, it does. It leaves the smell of pure air. Another way of saying this is, when you take all of the contaminants out of the air, what is left is pure, clean smelling air. You will know it the very first time you smell it.
64. **QUESTION:**
What is the life expectancy and warranty of the Guardian Air product?
- ANSWER:**
The Guardian Air lasts for approximately 25,000 hours of operation or about three years. The Guardian Air comes with a three-year parts warranty from RGF.
65. **QUESTION:**
What happens at the end of the Three Year Life Expectancy?
- ANSWER:**
The PHI cell that produces the photohydroionization process can easily be replaced by your licensed HVAC contractor.
66. **QUESTION:**
If RGF's Advanced Oxidation is so good and did reduce absenteeism in the Chicago schools, why isn't it in every school?
- ANSWER:**
When you present a new (20 years?) technology to a School District, they present it to the Board. The Board promptly (2-3 months) turns it over to the engineers, who are usually an outside consulting firm paid "by the hour". The engineers rub their chins and study it for many months. Engineers, by nature, are very conservative. I know, I am one, so is our Founder, President and CEO. We have lots of them. Presented with a new technology, these engineers will not want to make a decision, or if they do, it is easier to just say "no". Then they have no risk! Accordingly, schools are a tough sell. We've sold many schools, but most sales people will lose interest in the one year plus decision process.
67. **QUESTION:**
Have RGF's Guardian Air products been tested for ozone?
- ANSWER:**
Yes, many times by many agencies, labs and major hotels, restaurants, cruise lines and theme parks. May products produce low levels of ozone, including computers, fluorescent lights, refrigerators, electric motors, air conditioners, and hair dryers, to name a few. Guardian Air products tested less than half of the legal safe limits.
68. **QUESTION:**
Some UVc light companies state their UV systems can kill 99.9% of MRSA on a single pass and then reference an EPA study. Is this possible?
- ANSWER:**
Yes, it is possible. However, this is very misleading as the test was conducted on a test unit of five UV high-energy lamps, each 50" long in a reflective tunnel, which burns 1,100 watts of electricity. This is the equivalent of running a hair dryer in you're A/C 24 hours a day. This obviously generates a lot of heat in addition to burning a lot of electricity, and the units cost thousands of dollars. This system is not something the homeowner would install. We make similar industrial UV systems. However, we specify those for industrial, very expensive heavy duty systems for food processing or medical applications. A standard 12" HVAC UV light system installed in an A/C coil will destroy mold growth on the coil that the UV light shines on. What sections of the coil the light does not hit will grow mold. To completely cover a coil with UV light would take four to six lights. The lights used on an A/C coil will provide little, if any, airborne microbial kill as the UV energy and dwell time is not nearly enough to kill fast moving, airborne microbials. Air passing through an A/C coil is doing so at about 1,200 cfm or 30 inches per second; in layman's terms-"very fast."
69. **QUESTION:**
RGF has a tremendous amount of studies, lab tests and validations. Can I get copies?
- ANSWER:**
That would be impractical due to the sheer volume and the fact that most of the studies and tests were done by third parties or clients who will not permit us to send out their data. We can provide a summary of validations signed off and notarized by a licensed chemical professional engineer and licensed attorney. We will also show clients or approved representatives copies in our West Palm Beach office.
70. **QUESTION:**
How safe is the RGF Advanced Oxidation Plasma?
- ANSWER:**
Very safe. We are no higher than levels found in a forest or at sea.
71. **QUESTION:**
Why does RGF use a mega yacht as a showroom of new products?
- ANSWER:**
The yacht Envision is a floating R&D lab for new RGF products. The indoor air quality on a yacht is far worse than most buildings. This is due to a yacht being very tightly sealed, holding bilge water, storing sewage and being very damp. So, if RGF can cure Sick Yacht Syndrome (which we can), then we can easily cure Sick Building Syndrome.
72. **QUESTION:**
What other products does RGF have demos for on the yacht Envision?
- ANSWER:**
•Ice Maker/Bacteria Control
•Bilge Odor/Bacteria Control
•Sewage Holding Tank Odor/Bacteria Control
•Potable Water Treatment
•Fuel Bacteria/Algae Treatment
•Refrigerator Treatment
•Food Sanitizer
•Hot Tub Sanitizer
•Room Positive Ventilation Systems
•HVAC Air Purifiers
•Head (toilet bowl) Sanitizers
•Garbage Compactor Sanitizer
73. **QUESTION:**
Why did RGF develop the simulated sneeze machine?
- ANSWER:**
We had to prove in a double-blind study that our Advanced Oxidation Plasma was pro-active and could actually kill microbials at the source: airborne, which the sneeze machine did.
74. **QUESTION:**
What are the advantages of REME™ over PHI™?
- ANSWER:**
REME™, in addition to doing what PHI™ does with gases, odors and microbials, also drastically reduces particles. In addition, REME™ generates ionized hydro-peroxides, which are much faster than PHI™.