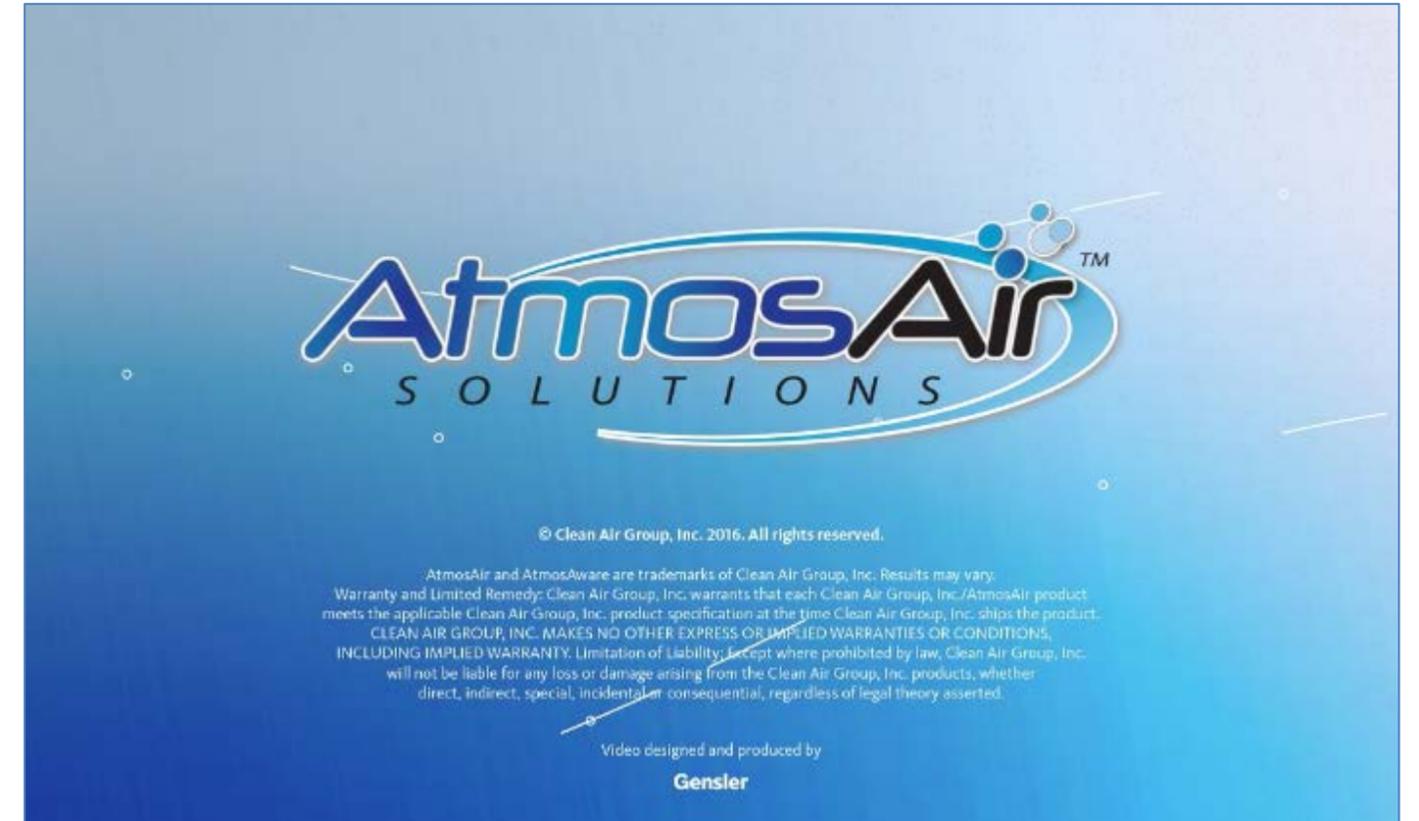




You Are What You Breathe.

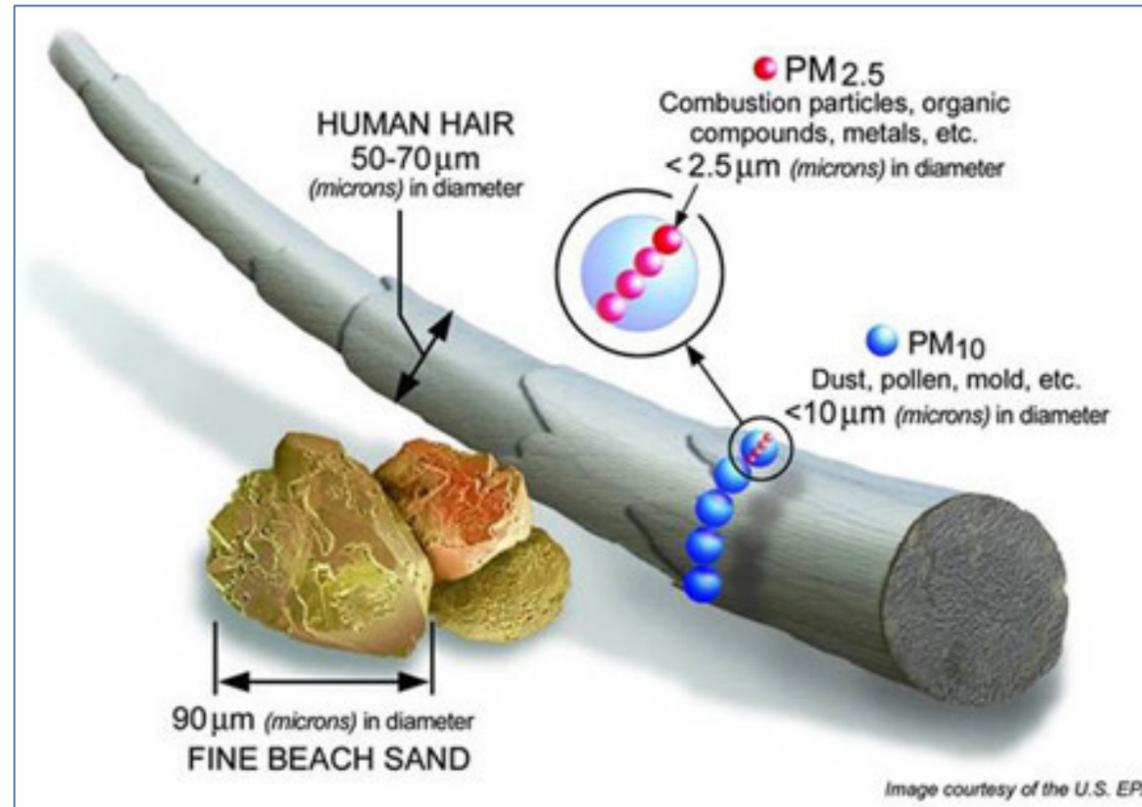
Gaming Facilities

AtmosAir 'How It Works' Video



- See video – [HERE](#).

What makes up smoke odor?



Particulate Matter (PM)

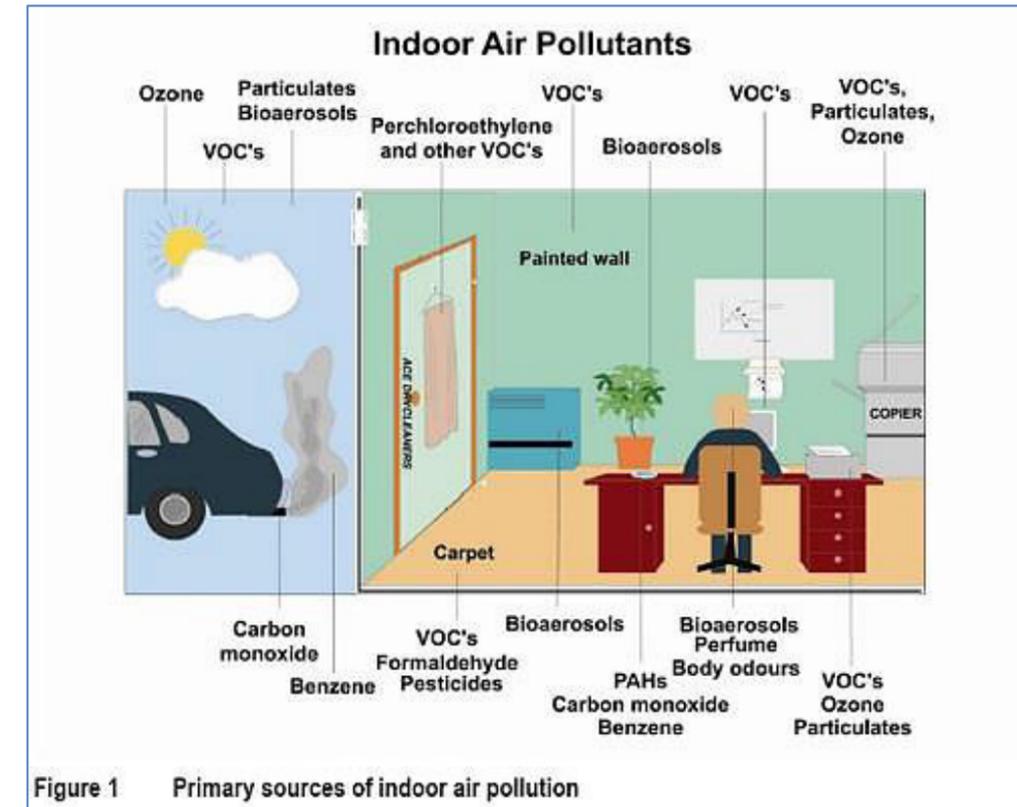


Figure 1 Primary sources of indoor air pollution

Volatile Organic Compounds (VOCs)

Smoke is made up of very small particles, gases (irritant volatile organic compounds) and water vapor.

AtmosAir Has Been Built on Measurement and Verification



AtmosAir Markets:

- Commercial Offices
- Healthcare
- Schools
- Hospitality
- Sports
- Airports
- Marine
- Convention Centers
- Grocery Stores
- Government
- Performing Arts



THE RITZ-CARLTON®



AtmosAir Gaming Projects

Casinos have to mitigate smoke to keep customers happy.



Casinos with AtmosAir:

- Rivers Casino (Pittsburgh)
- Stations Casinos (California and Nevada – 6 casinos)
- Sugar House Casino (Philadelphia)
- Twin Rivers Casino (Rhode Island)
- Hollywood Hard Rock (FL)
- Tampa Hard Rock (FL),
- Seminole Coconut Creek Casino (Florida)
- Seminole Brighton Casino (Florida)
- Revel Casino (Atlantic City, NJ)
- Borgata (partial) (NJ)
- Osage Casino Sand Springs (Tulsa, OK)
- River spirit Casino (Tulsa, OK)
- Stations Graton Casino (California)
- Palace Station (Las Vegas, NV)
- Green Valley Ranch (Las Vegas, NV)
- Twin River Casino (Lincoln, RI)
- Maryland Live! (Baltimore, MD)
- Scioto Downs (Columbus, OH)



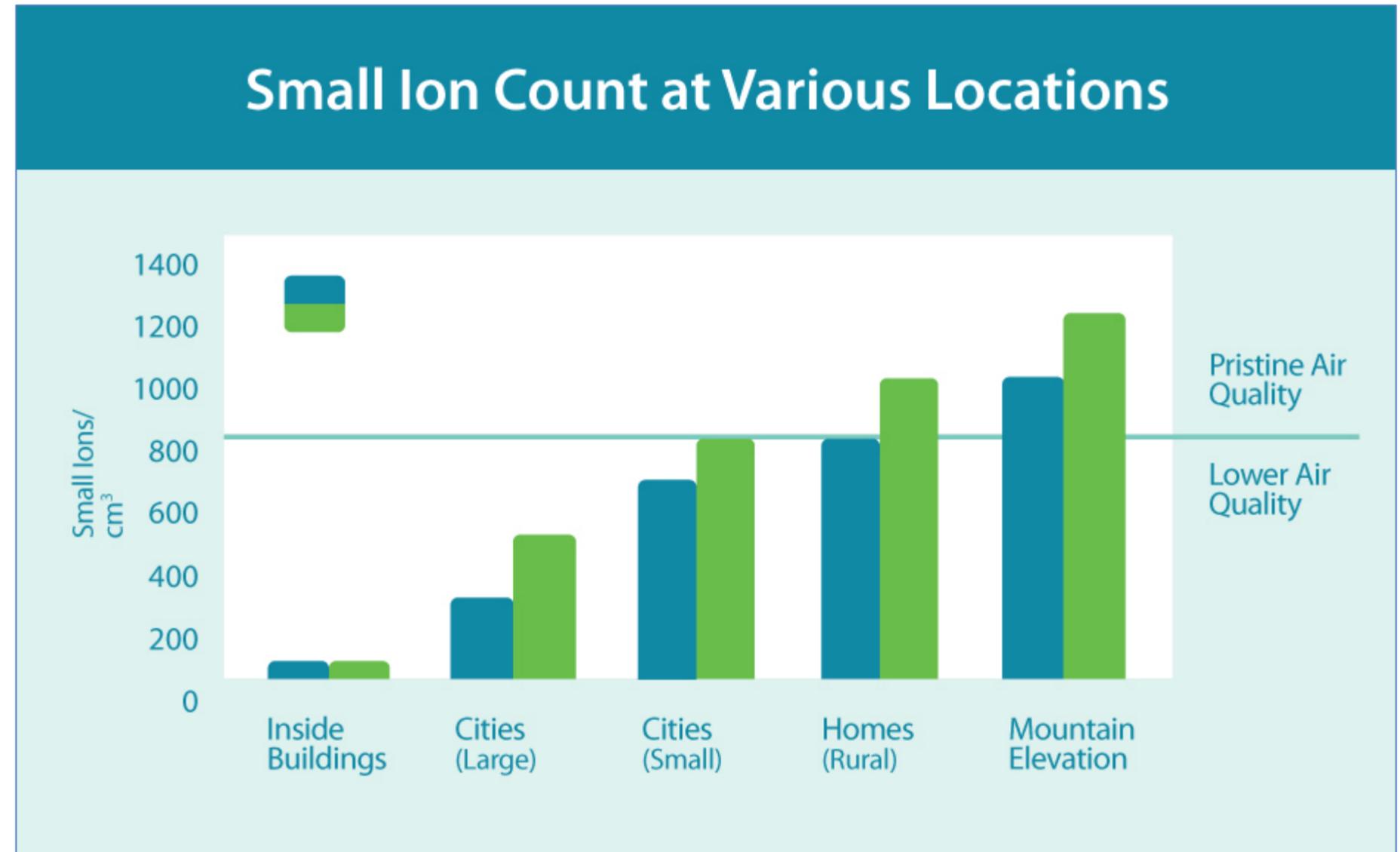
The AtmosAir Solution



AtmosAir Bipolar Ions



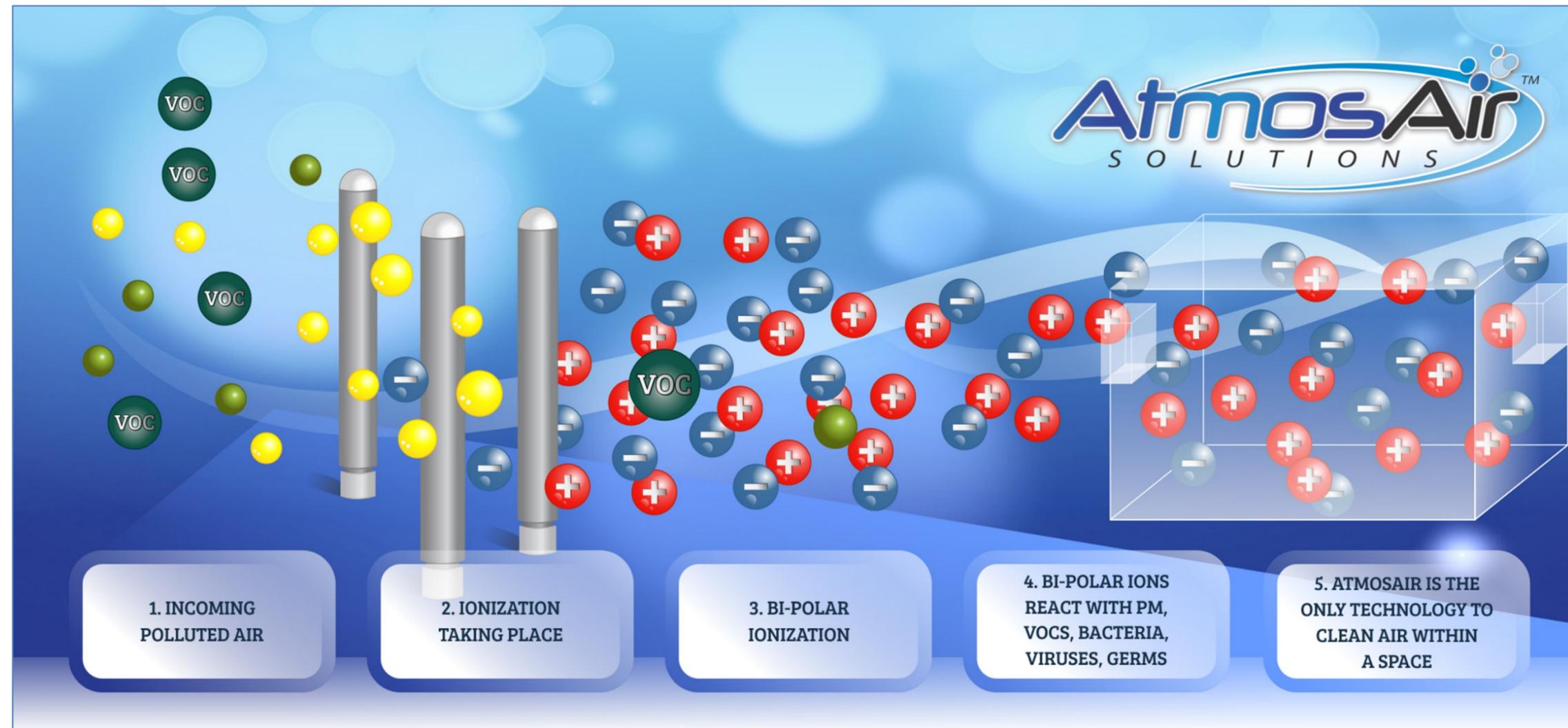
- In the most pristine environments there are naturally higher ion levels. These levels fall as we enter into more populated and polluted environments.
- Ion – An atom or molecule with a net electric charge due to the loss or gain of one or more electrons.
- AtmosAir Bi-Polar Ion (BPI) systems are designed to increase air ions as would be found in a natural state where no pollution exists.
- Ions help improve many various elements of indoor and outdoor air quality (PM, VOCs, virus).



FAQ: Does AtmosAir™ have a device that measures ion levels?

Yes. There is a specially designed ion meter that reports ion levels.

How AtmosAir Bipolar Ionization Works



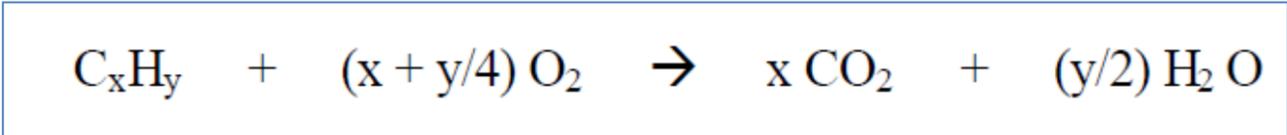
1. Airflow carries oxygen molecules over the AtmosAir Bipolar Ion Tubes.
2. AtmosAir Bi polar ionization tubes creates energy field (AtmosAir DBD BPI)
3. AtmosAir energy field produces positively and negatively charged air ions.
4. Negatively and positively charged air ions are attracted to and bond with oppositely charged airborne pollutants.
5. Interactions occur and reduce contaminant levels while producing measurably cleaner air.

AtmosAir vs. Odor

(Volatile Organic Compounds - (VOCs))



AtmosAir Bipolar Ions surround the VOCs (odorous gaseous elements) and break down hydrocarbon chains, reducing these complex compounds into immeasurable levels of carbon dioxide and water.



Simplistic Representation

- AtmosAir Destroys VOCS quickly, efficiently and permanently.
- HEPA filters cannot trap airborne VOCS because they are too small.
- Carbon filters trap some VOCs, but they are later dispersed back into the air.

Up to 90%
Reduction in VOCs

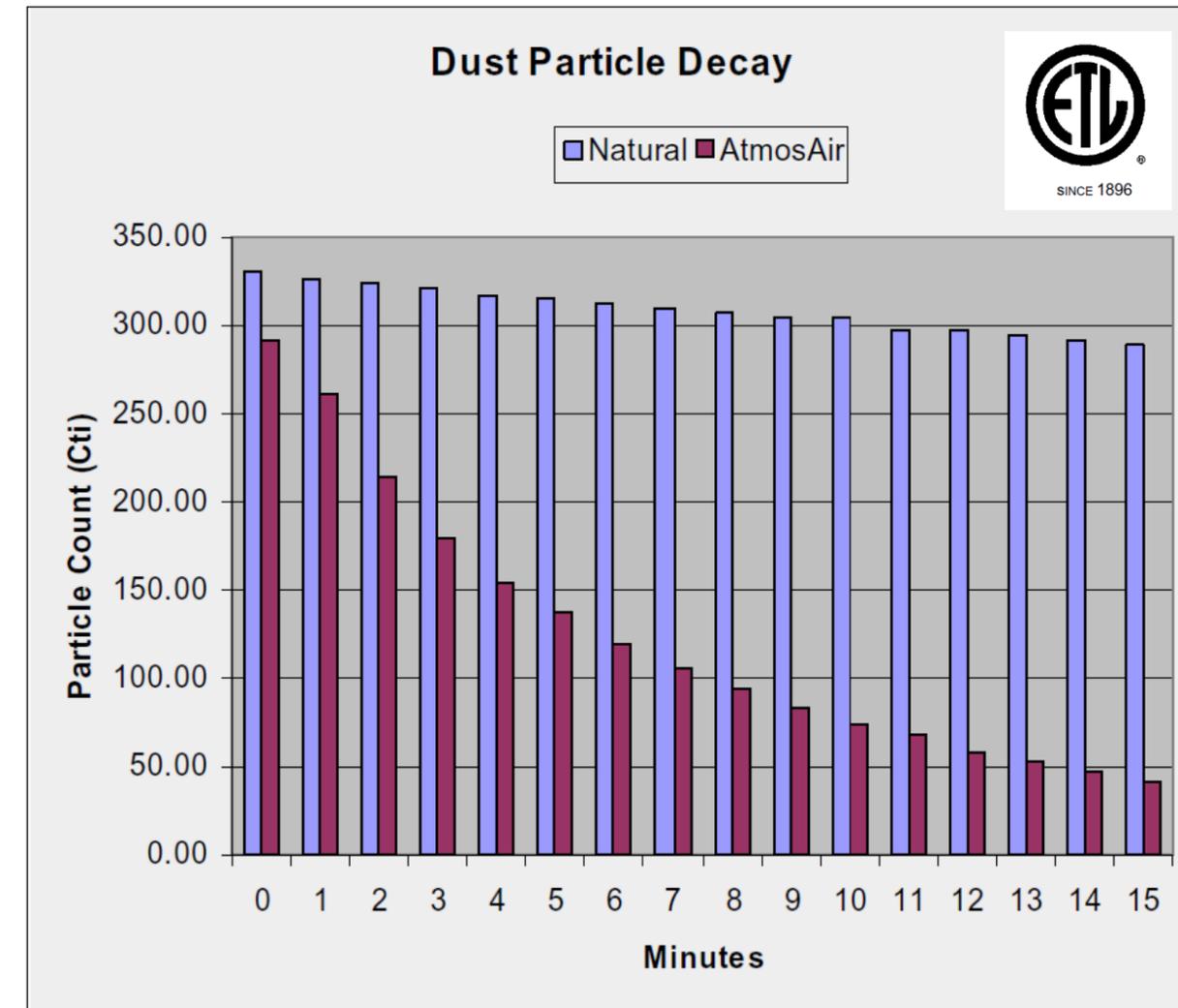
AtmosAir VOC Testing Results		
Client	TVOC Before (PPM)	TVOC After (PPM)
California Public Schools	69.25	1.65
Arena - Los Angeles, CA	13	0
Utility Company - FL	5	0
Connecticut Public School	2	0
Hotel - New York, NY	10	0
Consulting Engineering Firm - NY, NY	8	1
Investment Bank - New York, NY	150	12
Casino - Pittsburgh, PA	150	28
Animal Breeding Facility - NY	150	82
California State University - CA	17	2
REIT - CA	9	3
Arena - Nashville, TN	25	3
Office - New York, NY	150	20
Office - TX	150	26
Investment Bank - NJ	48	30
Hotel - Chicago, IL	150	10
Minnesota Public School - MN	6	3
Casino - Hollywood, FL	119	24
Office Building - NY, NY	18	6
Hospital - VA	137	64
Architect Office - NY, NY	17	5
Sports Training Center - CO	150	21

AtmosAir vs. Particulate Matter (PM)

- AtmosAir Ions agglomerate particles making them bigger and heavier, and easier to filter.

Up to 95%

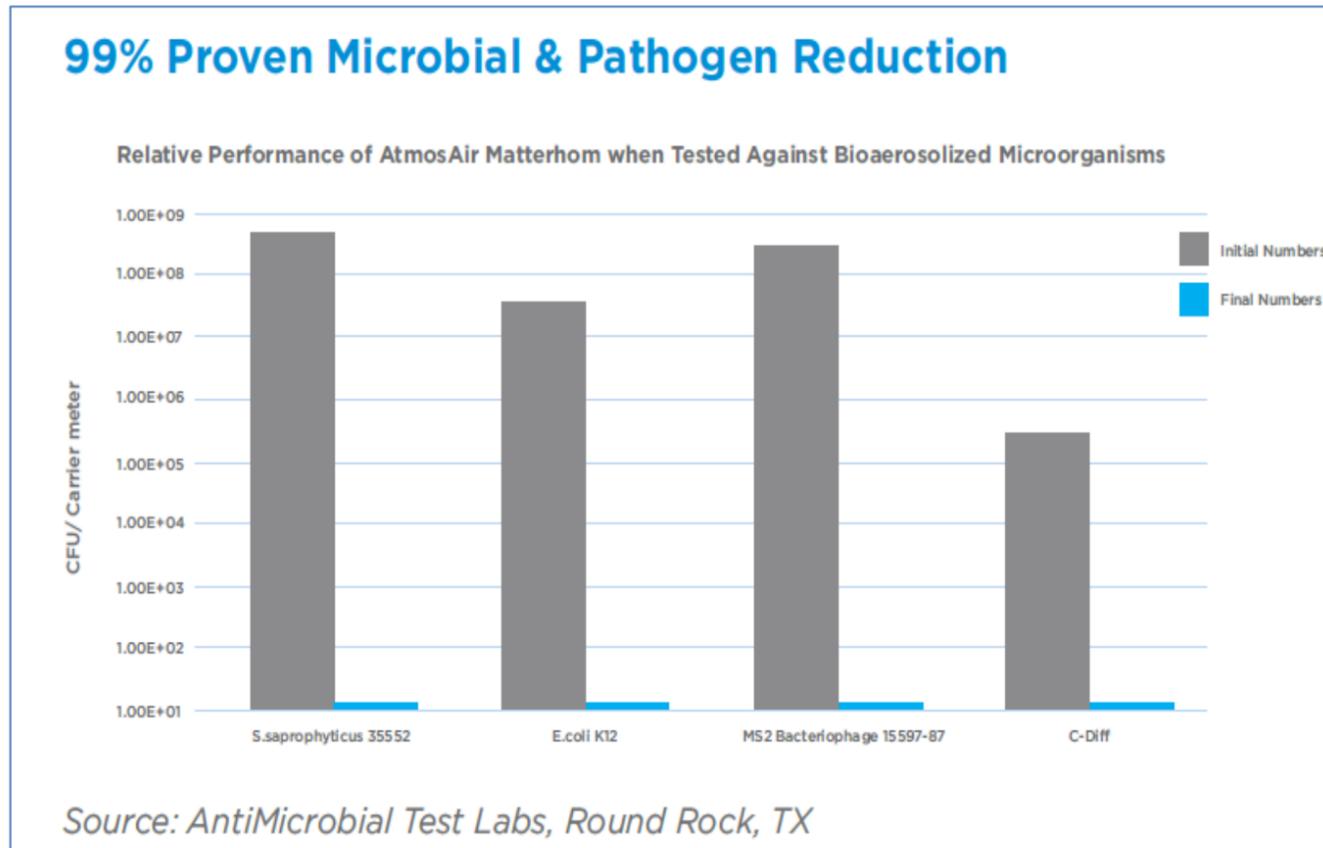
Reduction in Ultrafine Particulate Matter



FAQ: How does AtmosAir™ reduce particulate matter?

Many small particles that are generated within a space never get to system filters, increasing the chance of illness and respiratory distress. The AtmosAir™ bipolar ionization process helps more of these particles be removed from the air we breathe. Oppositely charged AtmosAir™ bipolar air ions cause particles to attract to other particles and become bigger and heavier. These larger particles can be trapped by HVAC system filters more easily, so the filters operate more efficiently – and effectively.

AtmosAir vs. Bacteria, Virus, and Germs



Mechanism for Inactivating Airborne Fungi

- Ions surround the mold spore.
- Ion break mold spore protein shell.
- Renders them inactive and unable to spread.

Mechanism for Inactivating Airborne Virus

- Ions attach themselves to virus.
- Ions pull hydrogen molecule off of virus to combine and form water vapor.
- Renders virus inactive and cannot infect even if it enters the body.

Mechanism for Inactivating Airborne Allergens

- Ions surround the airborne allergen and change into highly reactive hydroxyl radicals.
- The hydroxyls then deactivate the molecules of the IgE antibody binding site of the allergen.
- No allergic symptoms occur even if allergens enter the body.

- Less pathogens = healthier environment, reduced absenteeism
- Testing against C. Diff, Staph, MRSA, Fungi, Bacteria, Viruses, Allergens

FAQ: How does AtmosAir™ work against various bacteria, viruses and germs?

Positive and negative AtmosAir ions surround the surface proteins that form on organisms and trigger infections (hemagglutinin), changing them into highly reactive OH groups called hydroxyl radicals. These take a hydrogen molecule from the hemagglutinin and change it into water. The ions destroy the virus surface structure on a molecular level, rendering it incapable of causing infection even if it enters the body.

Conclusion = AtmosAir is Extremely Effective at:

- Mold and Pathogen Reduction
- Particulate Matter Decay
- VOC and Odor Reduction
- Mold Spore Reduction
- Energy Conservation



Cleaning Indoor Air using AtmosAir Bi-Polar Ionization Technology
Dr. Philip M. Tierno Jr., Professor of Microbiology and Pathology, New York University School of Medicine
April 2017

 Dr. Philip M. Tierno Jr.
Professor of Microbiology & Pathology
New York University School of Medicine

Steve Levine
AtmosAir Solutions/Clean Air Group, Inc.
418 Meadow Street, Suite 204
Fairfield, CT 06824

Dear Steve,

Thank you for your support of our school, and all your help with providing us with the best possible indoor environments, not an easy thing in New York City.

Feel free to use me as a reference regarding the efficacy of AtmosAir's air purification technology.

You can mention that I have evaluated AtmosAir and also personally use AtmosAir in my own home.

Myself, and my colleague Professor John Oxford, Chairman of the Hygiene Council and Professor of Virology at St Bartholomew's and the Royal London Hospital, Queen Mary's School of Medicine and Dentistry, have investigated and highly recommend AtmosAir bipolar ionization technology for air purification for indoor application, especially in medical facilities where the most antibiotic multi-drug resistant germs reside.

Please keep in mind that I generally do not endorse products but I make a qualified exception here because of AtmosAir's efficacy and the importance of air quality.

Also I'll be glad to answer any questions that anyone may have.

Regards,

Phil

Dr. Philip M. Tierno, Jr.
Professor of Microbiology & Pathology
NYU School of Medicine
NYU Langone Medical Center
US Member of the Global Hygiene Council

life and a person's
is towards cleaning
ements signed into
e emissions of six
o 2014! Thusly, the
ation's outdoor air
is task (1). These
o meet national air
ply summarize: for
is the U.S. economy
on and face lower
ss on outdoor air
The quality of air
re facilities (where
dings where people
th and well being,
asons. First, most
rted that indoor air
some standards for
ances, powders or
tration (OSHA), the
The EPA has also
HO (World Health
alth aspects of air
by air (4). IAQ is a
tures, especially as
ses (such as carbon
dicates, microbes
ypes, and anything
g indoor air, but in
ynamics of how we
are transmitted by
mitted by 3 other
d vectors (such as
1

AtmosAir vs. Competing IAQ Technologies



	AtmosAir DBD BPI	Media Filtration	UV	PCO	Needlepoint Ionization	Carbon Filters	Electronic Air Cleaners
Affects Contaminants “In the Space”	Yes	No	No	Yes	No	No	No
Reduces Odors	Yes	No	No	No	No	Yes	No
Reduces VOCs	Yes	No	No	No	Yes	Yes	No
Reduces Particles (PM)	Yes	Yes	No	No	No	Yes	Yes
Effective on Bacteria and Virus and Germs	Yes	No	Yes	Yes	Yes	No	No
Produce Ozone	No	No	Yes	Yes	No	No	Yes
Low Pressure Drop	Yes	No	Yes	Yes	Yes	No	Yes
Maintenance	Every 2 Years	Quarterly	Yearly	Yearly	6 months - 2 years	Bi-Annually	Monthly
Re-engineering of HVAC system needed	No	Yes	No	No	No	Yes	Yes
New Design and Retro-Fit Applications	Yes	No	Yes	Yes	Yes	No	No
Reduces Energy Costs	Yes	No	Yes	Yes	Yes	No	No
No Chemicals or By-Products	Yes	Yes	No	No	Yes	No	Yes
Tested Contaminant Reductions in Occupied Space	Yes	No	No	No	No	No	No
Published and Peer Reviewed Research	Yes	Yes	Yes	Yes	No	Yes	Yes
“Smart” System (Integrated with sensors and monitors)	Yes	No	No	No	No	No	No

**Other Products Clean the Air That Goes Through Them.
AtmosAir Cleans The Air In The Space Where You Breathe.**

Healthy Indoor Air. The Benefits Are Clear.



Cleaner air equals

- Better health
- Higher productivity
- Reduced illness & absenteeism
- Energy savings
- Marketing & reputational advantage

An advertisement for Tower 45, a skyscraper in NYC. The ad features a tall, modern building with a glass facade, set against a blue sky with white clouds and a mountain range in the background. The text on the ad includes: 'TOWER45', 'FRESH MOUNTAIN AIR COMES TO NYC', 'WSJ' (Wall Street Journal logo), 'WE ARE PROUD TO BE THE 1ST NYC BUILDING WITH PROVEN BREAKTHROUGH AIR PURIFICATION TECHNOLOGY', and 'Fresh air means a healthy, happy more productive work environment.' The Kamber Management Company LLC logo is also present. At the bottom, there is contact information for inquiries regarding units 1,500 - 26,000 rsf, including names and phone numbers for Michael Liebersohn, Arthur Mirante, Michael Gottlieb, James Lizmi, Nathan Krupp, and Gregory E. Kraut, along with the AVISON YOUNG logo and 'Exclusive Leasing Agent' text.

TOWER45
FRESH MOUNTAIN AIR COMES TO NYC

WSJ

WE ARE PROUD TO BE THE
1ST
NYC BUILDING WITH
PROVEN BREAKTHROUGH
AIR PURIFICATION TECHNOLOGY

Fresh air means a healthy, happy
more productive work environment.

Kamber
Management
Company LLC

For inquiries regarding units 1,500 – 26,000 rsf please contact:

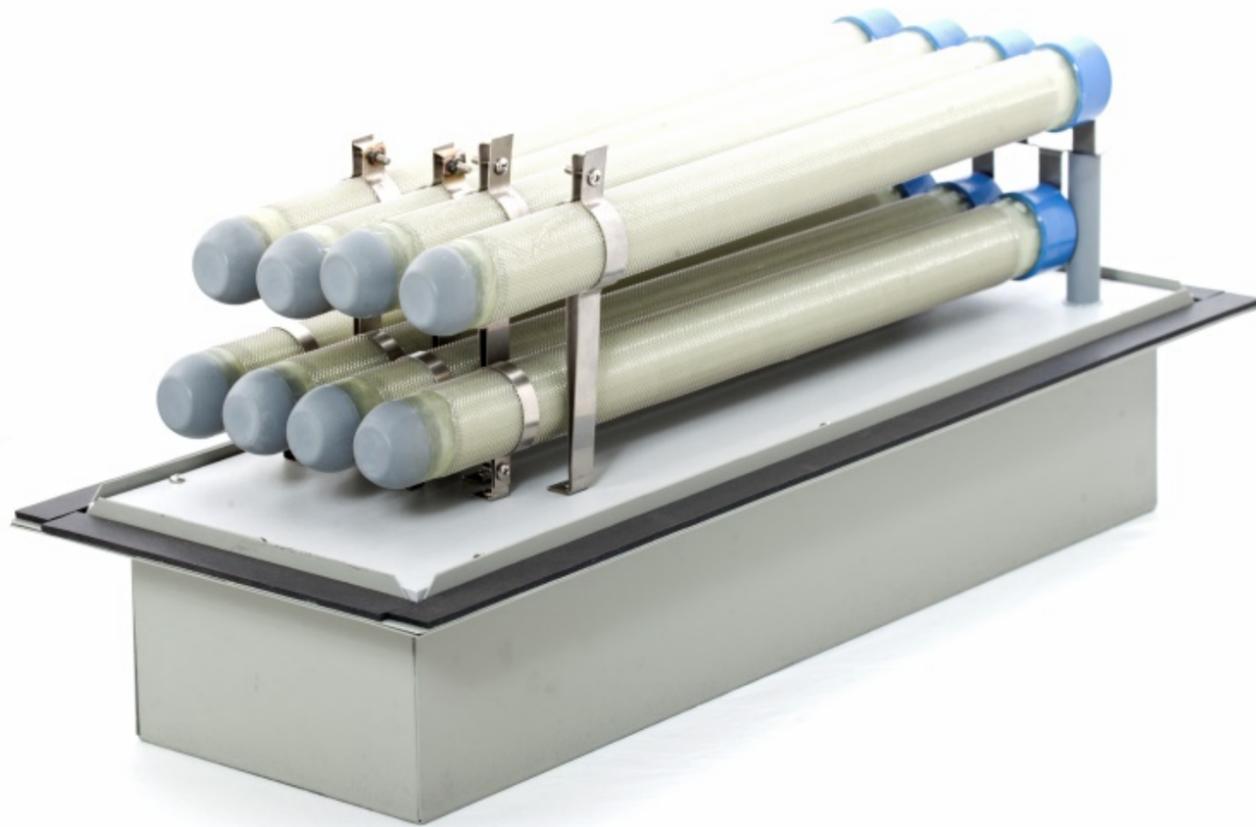
AtmosAir SOLUTIONS

Michael Liebersohn 212.729.7734
Arthur Mirante 212.729.1896
Michael Gottlieb 212.729.6809
James Lizmi 212.729.4857
Nathan Krupp 212.858.9361
Gregory E. Kraut 212.729.3203

AVISON YOUNG Exclusive Leasing Agent

AtmosAir Products & Installation





AtmosAir 508FC

SPECIFICATIONS

Air Flow Capacity.....	up to 15,000 CFM
Pressure Drop.....	minimum (see Fig. 1)
Housing Material.....	22-gauge powder-coated steel
Weight.....	22.5 pounds
Maximum Operation Temperature.....	150° F (65° C)

ELECTRICAL

Voltage.....	110/250 V
Frequency.....	50/60 hz 1 phase
Power Consumption.....	49 Watts
Current Draw.....	240 mA
Internal Fuse.....	500 mA
Field Electrical Connection.....	Junction Box

IONIZATION TUBE

Material.....	Multi Core Composite
Number.....	Eight (8)
Size.....	F (21")
Tube Life.....	17,600 hrs

*dependent on conditions and annual tube cleaning

AtmosAir Classifications



AtmosAir possesses the following classifications:

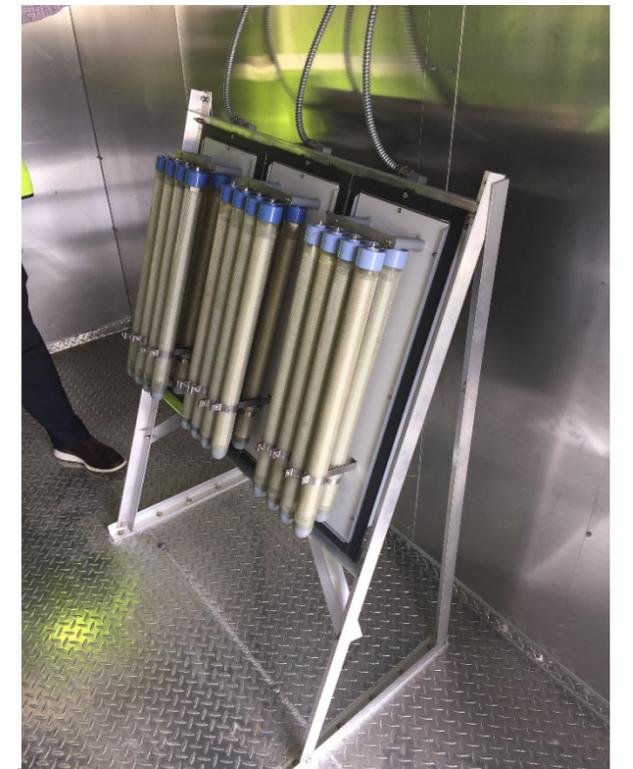
- Underwriters Laboratories UL 1995 classification
- Underwriters Laboratories UL 867 classification
- EU Standard EN 60335-2-40:2003
- EU Standard EN 61000-6-3:2001
- EU Standard EN 61000-6-1:2001
- EU Standard 60204-1:2006
- OPA 2807-10
- OPA 2808-10
- US EPA US Energy Star Certification
- ANSI / AHAM AC-1 2002
- ASHRAE 62.1 Indoor Air Quality Procedure Compliant
- 125 Dust CADR (Clean Air Delivery Rate)
- 190 Mold CADR (Clean Air Delivery Rate)
- US Green Building Council (USGBC) Member
- Energy Star Partner
- ASHRAE Member
- Hilton Strategic Partner – ‘Allergy Friendly Rooms’
- Green Energy Council Member
- Global Virus Network Member



**Underwriters
Laboratories**



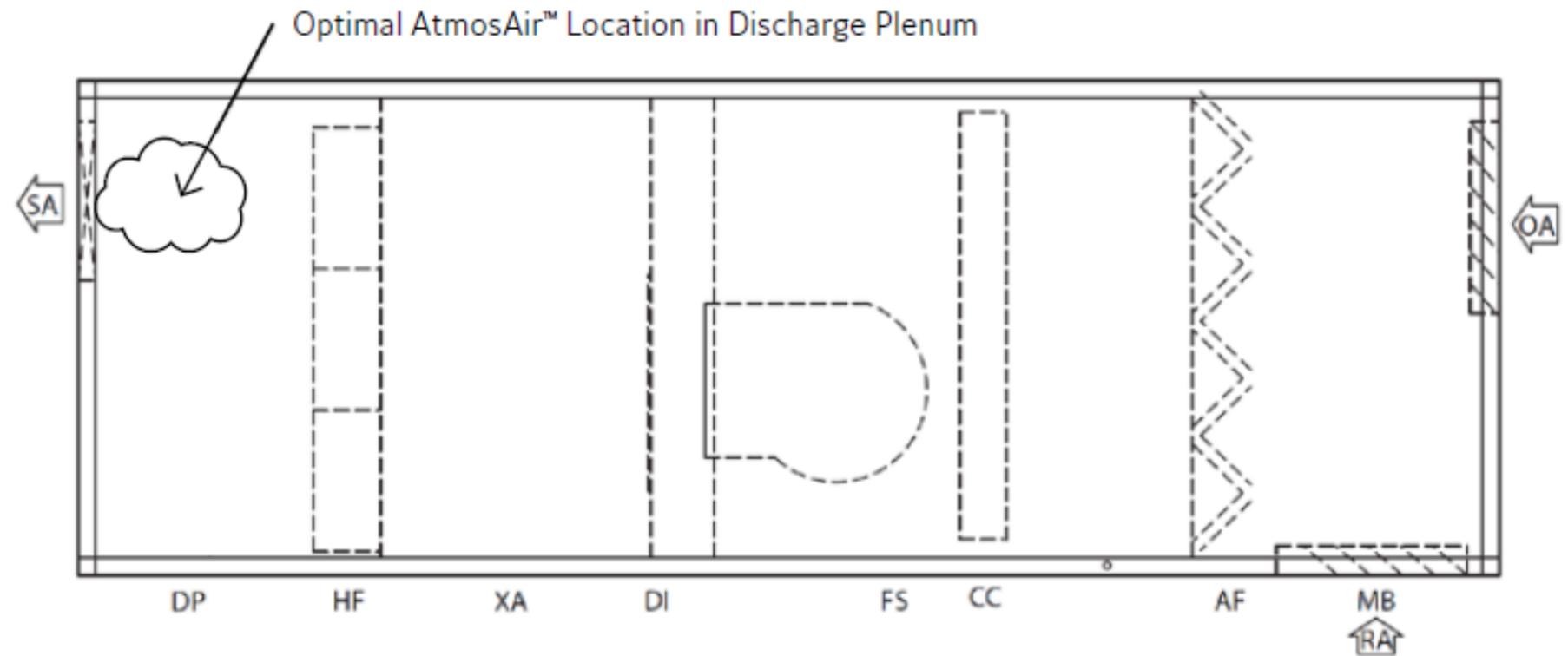
AtmosAir Installation Locations



- Supply Duct Mount
- Rack or Wall Mounted in Discharge of AHU/RTU

Application and Placement

The AtmosAir™ bipolar ionization system is intended to be mounted in the discharge plenum of an air handler, operating only when airflow is present. Thus, power to the ionization unit should be interlocked with fan operation or controlled via an air pressure switch. The size and number of recommended systems is dependent upon the airflow, the size of the space and the severity of pollution and odors. The level of ionization is adjustable.



AtmosAir Multi-Core Composite Tubes



- Produces More Ions than Glass Tubes
- Durable & Shatterproof
- Withstands Maximum Airflow
- Withstands Temperature Swings
- Two Year Life Span

FAQ: How often should the AtmosAir™ ionization tubes be changed?

AtmosAir™ composite tubes will degrade and become ineffective after approximately 17,600 hours (two years) of use.

AtmosAware Indoor Air Quality Monitors

Wi-Fi Enabled

Parameters:

- Temperature
- Relative Humidity
- VOCs
- Particulate Matter (PM2.5)
- Carbon Dioxide
- Indoor/Outdoor Air Quality Index



Display Local Outdoor Air Quality and Indoor Air Quality on Phone, App, or Monitor

Case Studies



Case Study | Hard Rock Hotel and Casinos



Tampa Hard Rock/Hollywood Hard Rock
Seminole Gaming
Tampa, Hollywood, Immokalee, Brighton, Coconut Creek

SITUATION

- Seminole Tribe of Florida owns and operates seven casinos in FL.
- Hollywood Hard Rock and Tampa Hard Rock in FL are both in the midst \$1 billion + renovations.
- AtmosAir was installed in various areas of Tampa Hard Rock and Hollywood Hard Rock.

IMPLEMENTATION

- AtmosAir was installed in various areas of both casinos.
- Before investing further into the system, the Seminole tribe and the Hard Rock casinos hired a third party engineering firm to engineer an indoor air quality test with testing in four locations of the casino.
- A third party hygienist was responsible for sampling various parameters of air quality including: particulate matter 0.3-10, VOCs, and nicotine.



Hollywood Hard Rock, Hollywood, FL

“We have worked very hard with the AtmosAir team to improve our indoor air quality in our facilities. We are satisfied with the improvements, we maintain the systems rigorously, and we are working everyday to make our environments the best gaming environments in the world.”
– *Dave Miller, VP Development, Seminole Hard Rock*

RESULTS

- 80% reduction in nicotine.
- 35% reduction in PM5 particles
- 20% reduction in VOCs
- All results recorded third party by NTS Environmental



Case Study | Rush Street Gaming



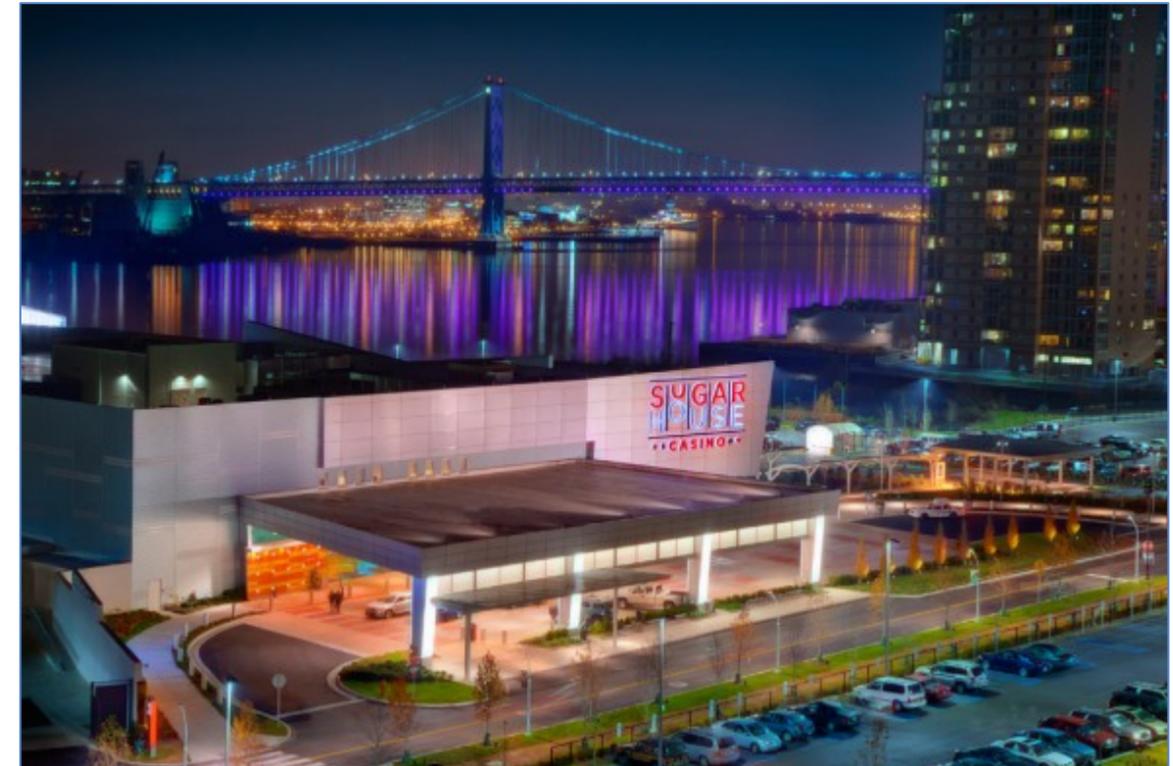
Rush Street Gaming Multiple Casinos

SITUATION

- Rush Street Gaming is the owner and operator of the major casinos in four leading US markets (Chicago, Pittsburgh, Philadelphia)
- DMA Associates serving as senior advisor to Rush Street Gaming recommended AtmosAir to Rush Street Gaming and Sugar House Casino Architect Cope Linder after a site visit to Tampa Hard Rock.
- Rush Street Gaming wanted to mitigate odors and complaints while providing better air quality for their employees.

IMPLEMENTATION

- AtmosAir was first installed throughout SugarHouse casino in January of 2014.
- 75 AtmosAir 500 Series Systems were installed in the air handlers.



Above: SugarHouse Casino (Philadelphia)
Below: Rivers Casino (Pittsburgh)

Case Study | Rush Street Gaming



“We have been working with the AtmosAir team and our consulting engineers for over three years now. We first installed in SugarHouse, had success, then installed throughout the 120,000 square feet of Rivers Casino. We have also recently installed in our new SugarHouse expansion. I recommend the system and the people behind the system as they strive to help us.”

– *Joe Scibetta, VP Development and Operations, Rush Street Gaming*

RESULTS

- VOCs were reduced by over 80% in extensive air testing.
- Customer complaints have been decreased.
- AtmosAir eventually installed throughout SugarHouse and the 2016 expansion of SugarHouse (260k square feet) as well as Rivers Casino in Pittsburgh (120k square feet).



Case Study | Revel Atlantic City



REVEL Atlantic City, NJ

SITUATION

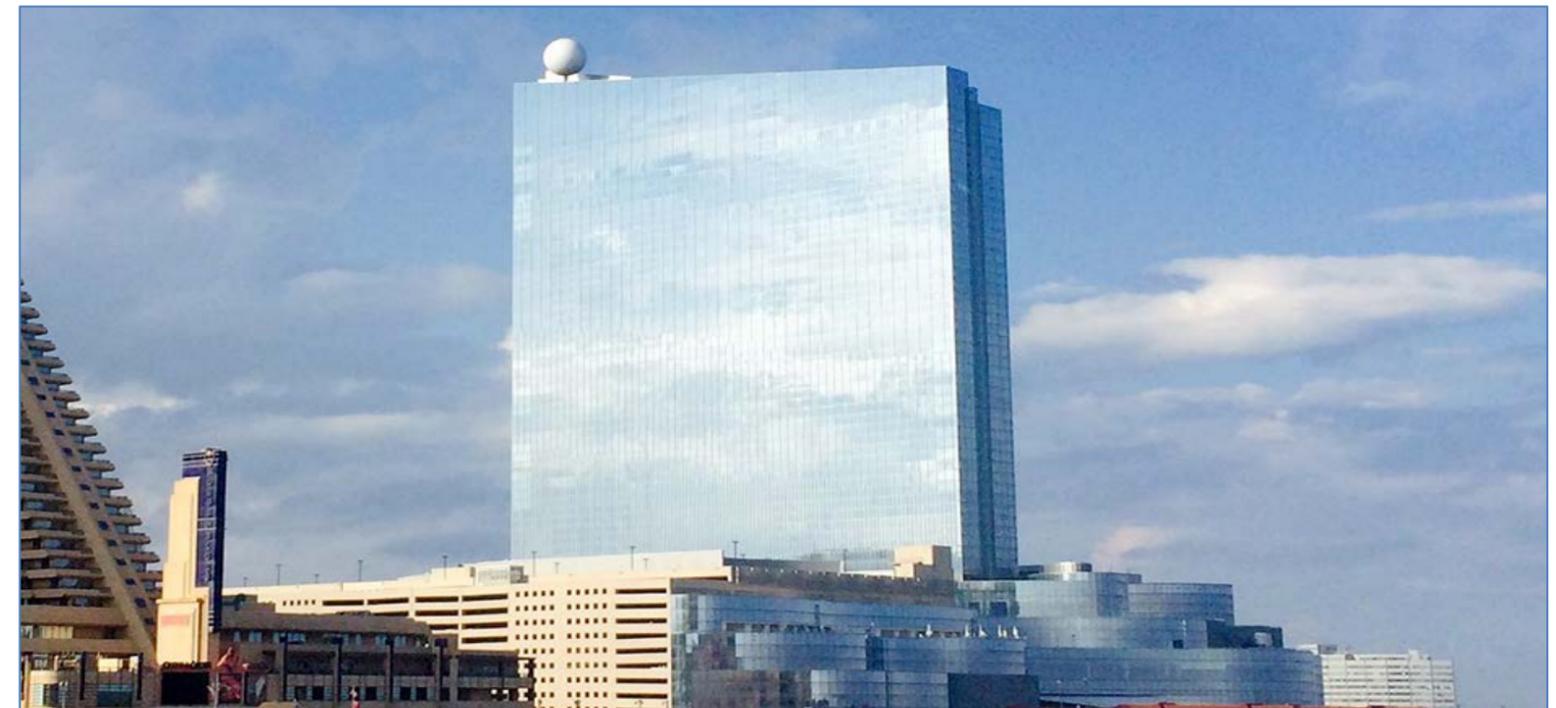
- Revel Atlantic City Casino is one of the largest gaming spaces in Atlantic City (135k square feet).
- Revel installed AtmosAir throughout when they went from a non-smoking casino to a smoking casino. AtmosAir is used for smoke and odor control, to reduce employee absenteeism, and to improve energy efficiency.

IMPLEMENTATION

- AtmosAir was specified by Giovanetti Shulman Associates, Consulting Engineers (GSA)
- AtmosAir was installed throughout the gaming floor.

RESULTS

- “Our engineers recommended AtmosAir, and once installed we did not smell smoke or odors in the gaming space and the system obviously worked. I’d walk the floor and ask patrons if they smelled smoke, and 99 percent of the time they did not.”
- — John Lezenby, Director of Facilities, Revel Atlantic City



Case Study | Revel Atlantic City



REVEL Atlantic City, NJ

SITUATION

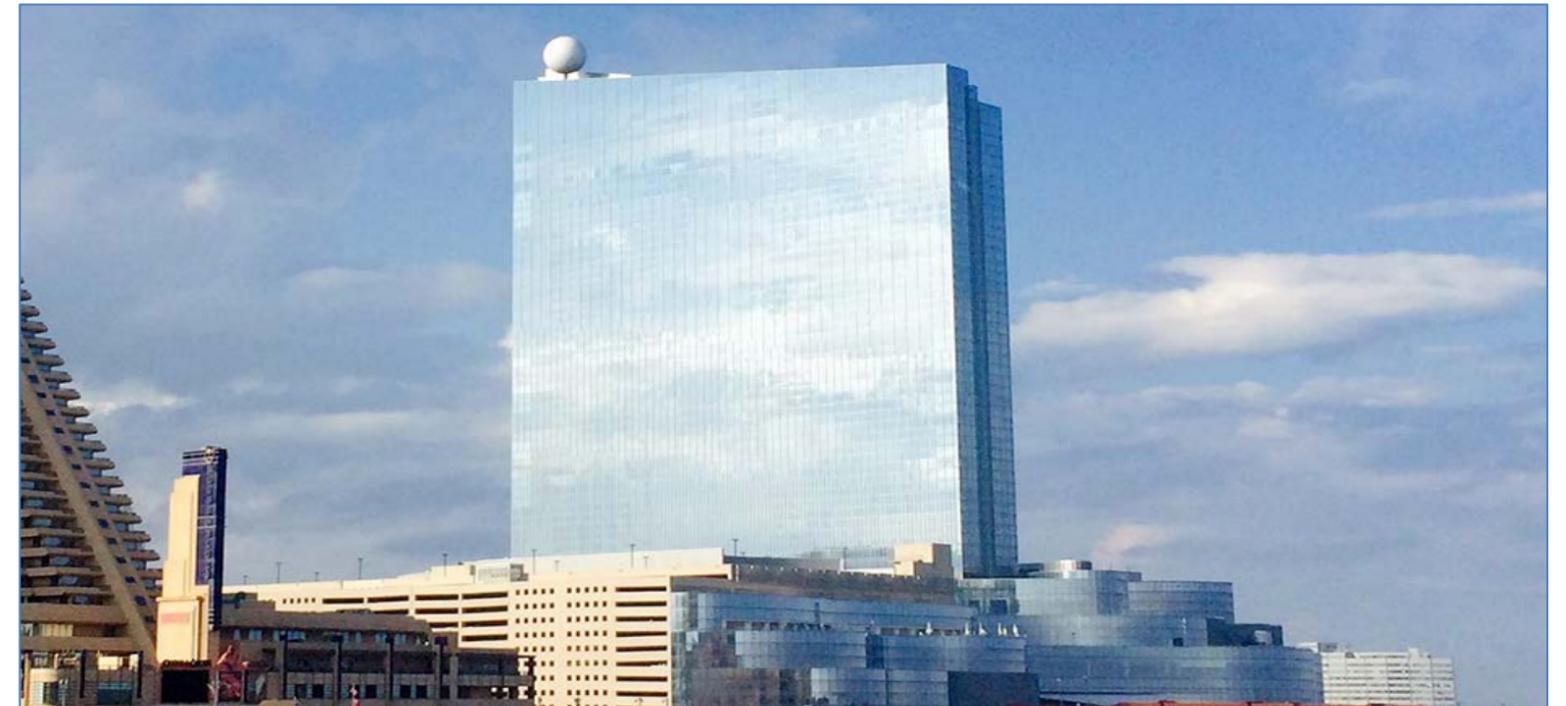
- Revel Atlantic City Casino is one of the largest gaming spaces in Atlantic City (135k square feet).
- Revel installed AtmosAir throughout when they went from a non-smoking casino to a smoking casino. AtmosAir is used for smoke and odor control, to reduce employee absenteeism, and to improve energy efficiency.

IMPLEMENTATION

- AtmosAir was specified by Giovanetti Shulman Associates, Consulting Engineers (GSA)
- AtmosAir was installed throughout the gaming floor.

RESULTS

- “Our engineers recommended AtmosAir, and once installed we did not smell smoke or odors in the gaming space and the system obviously worked. I’d walk the floor and ask patrons if they smelled smoke, and 99 percent of the time they did not.”
- — John Lezenby, Director of Facilities, Revel Atlantic City



Case Study | Norwegian Cruise Line



Norwegian Cruise Line Multiple Ships

SITUATION

- Gaming and common areas of NCL ships were having issues with odors, and smoke leading to passenger complaints.

IMPLEMENTATION

- (17) AtmosAir 500 series systems were installed in (13) AHUs serving the ship.
- (6) AtmosAir Standalone systems were installed within the space in 'dead' areas where air flow was weak.

RESULTS

- On board staff saw a noticeable difference in the air quality and passenger complaints were reduced.
- AtmosAir installations expanded from originally NCL's Epic Ship to the NCL Jewel and NCL Jade.



AtmosAir™

YORK® Air Handling Systems have partnered with AtmosAir™ Solutions for high-efficiency, chemical-free air purification in air handling systems. AtmosAir™ Solutions is the leading manufacturer of air purification using bipolar ionization technology.

The Indoor Air Quality Solution

We spend up to 90% of our time indoors, which is why the U.S. Environmental Protection Agency has named indoor air quality one of the top 5 health threats. Bipolar ionization technology from AtmosAir™ contributes to better health by restoring indoor air to its natural state without pollution or contaminants. AtmosAir™ has been used effectively in a variety of applications, including:

- Healthcare facilities
- Schools
- Airports
- Commercial office spaces
- Sports environments
- Museums
- Casinos

Application and Placement

The AtmosAir™ bipolar ionization system is intended to be mounted in the discharge plenum of an air handler, operating only when airflow is present. Thus, power to the ionization unit should be interlocked with fan operation or controlled via an air pressure switch. The size and number of recommended systems is dependent upon the airflow, the size of the space and the severity of pollution and odors. The level of ionization is adjustable.

Quantity and Selection

AtmosAir™ offers two models designed for use in YORK® air handling systems: model 500FC, which has 5 tubes and model 508FC, which has 8 tubes. Depending on the indoor air quality in the facility and the supply CFM required, your unit will be equipped with one or multiple quantities. Indoor air quality is determined by referencing the table at right. Our Application Engineering team has a tool that will determine the correct quantity of AtmosAir™ models based on your air quality selection and CFM requirements. This tool also generates the data to build-out a fully defined bill of materials.

YORKWorks Indoor Air Quality Level Selection Table

ASHRAE 62.1 Indoor Air Quality Class	AtmosAir™ Indoor Air Quality Level	Building Description
I	A	Residences, Airports, Office Spaces, School/Classrooms, Day Care Centers
II	B	Nursing Homes, Locker Rooms, Manufacturing, Food Processing, Restaurants
III	C	Beauty Salons, Casinos, Waste Water Applications, Industrial Facilities, Garbage Rooms, Kitchens
IV	NA	Exhaust to outdoors

Continuous Disinfection

Microbiological agents exist all around us, some of which are too small to see. When not kept in check, these organisms can cultivate, populate and be transmitted throughout a facility. This can cause unwanted odors, illness and allergy symptoms. For this guide, we will focus on viruses, bacteria and fungi (mold) – these are all challenges within an indoor air handling unit.

AtmosAir™ Bipolar Ionization Has Been Tested Against:

- Clostridium difficile
- Bacteriophage MS2 (norovirus surrogate)
- Escherichia coli (E. coli)
- Staphylococcus saprophyticus (Staph/MRSA)
- Cladosporium (black mold, mildew)
- Penicillium/Aspergillus
- Coliform bacteria
- Bacillus subtilis
- H1N1 influenza virus (Swine flu)
- Coronavirus
- HSN1 zavian influenza virus (Bird flu)
- Airborne allergens
- Ultraviolet particles

Maintenance, Power and Control

AtmosAir™ systems come with composite BPI tubes that should be replaced every two years. AtmosAir™ is installed in the air handling unit and can be connected to a building management system for monitoring. Minimal power is consumed by AtmosAir™ systems, with both the model 500FC and model 508FC having a draw of just 0.6 to 1.0 amps. In a system up to 54,000 CFM, no more than 6 amps would be drawn at 115 volts.

How Bi-polar Ionization Works

Mechanism for Inactivating Airborne Fungi

- Ions surround the mold spore.
- Ion break mold spore protein shell.
- Renders them inactive and unable to spread.

Mechanism for Inactivating Airborne Allergens

- Ions attach themselves to virus.
- Ions pull hydrogen molecule off of virus to combine and form water vapor.
- Renders virus inactive and cannot infect even if it enters the body.

Mechanism for Inactivating Airborne Virus

- Ions attach themselves to virus.
- Ions pull hydrogen molecule off of virus to combine and form water vapor.
- Renders virus inactive and cannot infect even if it enters the body.

From the Leader in Air Handling Solutions

With over 75 years of combined HVAC design experience in acoustics and air filtration, the team at YORK® can engineer the application-specific solution for your exact indoor air quality and system performance requirements. From filters to air purification, your specific needs will be reviewed for maximized energy reduction and indoor air quality. With YORK® air handling units, you get the most out of your HVAC investment by working with the industry's leading HVAC company.

Johnson Controls, the Johnson Controls logo and YORK are registered trademarks of Johnson Controls, Inc., in the United States of America and other countries. Other trademarks and logos may be trademarks or registered trademarks of other companies. ©2017 Johnson Controls, Inc. 911 One JCI, Milwaukee, WI 53202. All rights reserved worldwide. Printed in USA PAB-9233-A-1007

FOR MORE INFORMATION VISIT JOHNSONCONTROLS.COM

Frequently Asked Questions

How does AtmosAir™ reduce particulate matter?

Many small particles that are generated within a space never get to system filters, increasing the chance of illness and respiratory distress. The AtmosAir™ bipolar ionization process helps more of these particles be removed from the air we breathe. Oppositely charged AtmosAir™ bipolar air ions cause particles to attract to other particles and become bigger and heavier. These larger particles can be trapped by HVAC system filters more easily, so the filters operate more efficiently – and effectively.

Does AtmosAir™ reduce Volatile Organic Compounds (VOCs)?

Bipolar ions generated by the AtmosAir™ system surround the VOCs and break down hydrocarbon chains, reducing these complex compounds into immeasurable levels of carbon dioxide and water.

How does AtmosAir™ work against various bacteria, viruses and germs?

Positive and negative ions surround the surface proteins that form on organisms and trigger infections (hemagglutinin), changing them into highly reactive OH groups called hydroxyl radicals. These take a hydrogen molecule from the hemagglutinin and change it into water. The ions destroy the virus surface structure on a molecular level, rendering it incapable of causing infection even if it enters the body.

Does AtmosAir™ have a device that measures ion levels?

Yes. There is a specially designed ion meter that reports ion levels.

Does the ionization system increase the oxygen content in the air?

No. The ionization technology increases the number of oxygen ions, not the number of oxygen molecules.

How do I know my AtmosAir™ system is working properly?

First, perform a local check and ensure that the green light on the front of your ionization unit is illuminated. If the green light is not on, have the system serviced by Johnson Controls. If the green light is on, but you do not feel the air is being cleaned sufficiently, you can turn the ionization control knob up until you are satisfied with the air quality. If your ionization tubes have not been replaced within the last 24 months, you should contact Johnson Controls to have the tubes replaced.

What is the warranty of my system?

AtmosAir™ warrants the system for two calendar years from shipment date.

Are bipolar ionization units effective in 100% outside air units?

AtmosAir™ systems are equally effective whether the air system is 100% outside air and exhaust air, or 100% re-circulated air, or a combination.

Does AtmosAir™ bipolar ionization take the place of media filters?

No. AtmosAir™ bipolar ionization is an air conditioning component that works in conjunction with mechanical filtration and is not intended to replace components such as filters, etc.

Johnson Controls, the Johnson Controls logo and YORK are registered trademarks of Johnson Controls, Inc., in the United States of America and other countries. Other trademarks and logos may be trademarks or registered trademarks of other companies. ©2017 Johnson Controls, Inc. 911 One JCI, Milwaukee, WI 53202. All rights reserved worldwide. Printed in USA PAB-9233-A-1007

FOR MORE INFORMATION VISIT JOHNSONCONTROLS.COM

AtmosAir Has Been Built on Results



www.AtmosAir.com