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Experimental Apartment in Beijing Achieves 99% Purity of Indoor Air

BEIJING, Aug 16, 2008 — Two indoor air quality (IAQ) experts who are in China to work with athletes during the Beijing 2008 Olympic Games announced today that they have achieved up to 99% purity of the indoor air in their Beijing apartment. They installed specialized ultra-high efficiency air cleaning equipment to demonstrate that despite Beijing's reputation as having the world's worst air pollution problem — it is possible to create healthy indoor environments anywhere in the world. They have outfitted their apartment with sophisticated air quality measuring equipment and are daily posting the results of their project on the internet at www.CleanAirApartment.com.

“There has been much in the press about Beijing's bad outdoor air pollution problems,” says Frank Hammes, project designer for Clean Air Apartment, “But in reality the average person spends 90% of their time indoors. It is indoor air that most affects our health. While we can't do much about outdoor air — we can take control of our indoor environments and make them healthy. That is what we have done here with Clean Air Apartment. We have taken a normal apartment in the world's most polluted city and turned it into one of the healthiest indoor environment that can be found anywhere in the world.”

Hammes, and his co-worker, Kirk Sullivan, have been in Beijing since the beginning of August working with USA athletes to outfit their sleeping and training areas with ultra-high efficiency air cleaning systems. The project, called Operation Clean Air, is the first time ultra-high efficiency air cleaning has been used in a comprehensive plan to gain a performance advantage at an athletic event. All of the air cleaning systems used in Operation Clean Air are tested and certified to filter down to 0.003 microns, smaller than a virus, and more than 1,000 times smaller than the average particle size that is measured in PM 10 air pollution ratings.

“We're air quality geeks,” says Sullivan. “We had to keep our project with athletes top secret for more than a year, but now that the games have begun we can finally talk about it. In all of the excitement of the competitions and people winning medals, we didn't want to lose focus that what we are really about is creating healthy homes. There are hundreds of millions of people around the world with severe allergies, asthma, other respiratory conditions and environmental sensitivities. We are introducing to the world an innovative new kind of air cleaning technology that comprehensively removes indoor airborne irritants like dust, mold, pollen, diesel soot, allergens, even bacteria and viruses at a level never before previously possible in homes. Clean Air Apartment gives us the opportunity to show people that this technology isn't just for helping athletes win medals — it's for improving your health and your families health in your home.”

Hammes and Sullivan are inviting doctors and scientists to come and visit them at Clean Air Apartment in Beijing so that they can demonstrate how they have created such a healthy indoor environment. They are also blogging their activities and giving daily indoor and outdoor air quality readings to show their progress on [CleanAirApartment.com](http://www.CleanAirApartment.com).

“We are data logging outdoor and indoor levels of airborne particles in terms of PM 10, PM 2.5, and PC 0.3,” says Hammes. “Most of the government agencies have been reporting PM 10 levels in Beijing, but we think that is outdated. PM 2.5 is a better and PC 0.3 is the best base measure of particulate air pollution. Most particles in PM 10 are relatively large particles so to speak, sort of the ‘rocks’ in the air, but it is the submicron particles that are actually most dangerous to people. These ultra-fine particles are capable of penetrating lung tissue and entering the blood stream.”

Hammes and Sullivan’s original goal with Clean Air Apartment was to get the indoor air quality purity to above 95% on measurements 0.3 microns and larger. They themselves were surprised when they reached the 99% purity mark in individual rooms.”

When you consider that most air purifiers that people purchase at department stores improve your air quality by less than 5% in your home,” says Hammes, “we were very happy when we approached the 90% purity mark. But then as the systems continued to clean already filtered air, we rapidly saw the numbers go up a percentage point or two each day. When we consistently reached 95% we were honestly able to say that we have better air here in our apartment in Beijing than you have in the Swiss Alps.”

Hammes and Sullivan are no strangers to innovative air cleaning projects. They work for Icleen, the world leader in medical grade air filtration equipment. They built the first ever air-cleaned environment for a sick orangutan, and they have been creating America’s healthiest homes on a popular ABC reality TV show for families with a variety of medical conditions. They even one day took the step of having Sullivan lock Hammes in a glass room and fire in tear gas with a grenade launcher to demonstrate the effectiveness of ultra-high efficiency air filtration.”

We’ve done many things over the last few years to try to demonstrate and educate people about what is really possible with good air cleaning,” says Sullivan. “There are a lot of families out there with children with severe allergies and asthma, and we are trying to raise awareness about an innovative new technology that can genuinely improve people’s lives.”

About Clean Air Apartment and Icleen

CleanAirApartment.com is an innovative experiment in ultra-high efficiency air cleaning that is sponsored by Icleen. Icleen North America, Inc. is a member of the Swiss-based Icleen Group which has over 45 years experience in the design and manufacturing of ultra-high efficiency air purification systems. Icleen offers clean air solutions for a wide range of applications, from commercial air cleaning systems for hospitals and other critical environments to products for homes, offices, and hotels. Icleen is the American Lung Association’s exclusive educational partner from the air purifier industry.