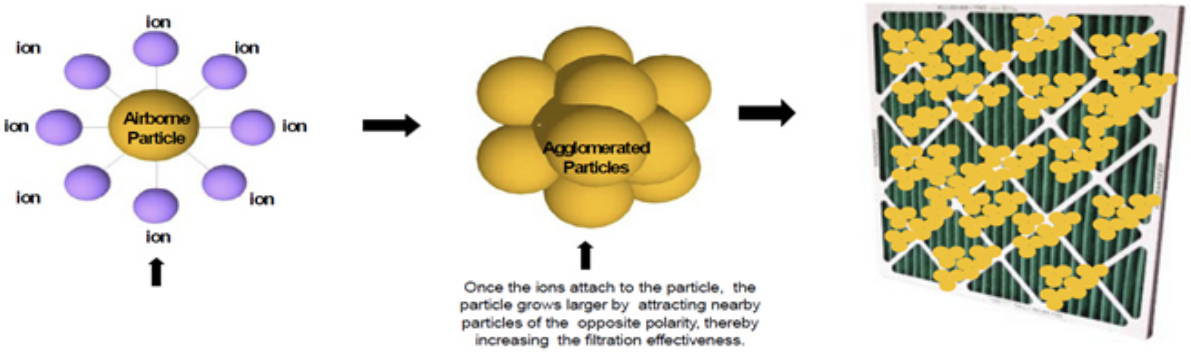
NEEDLEPOINT BIPOLAR IONIZATION

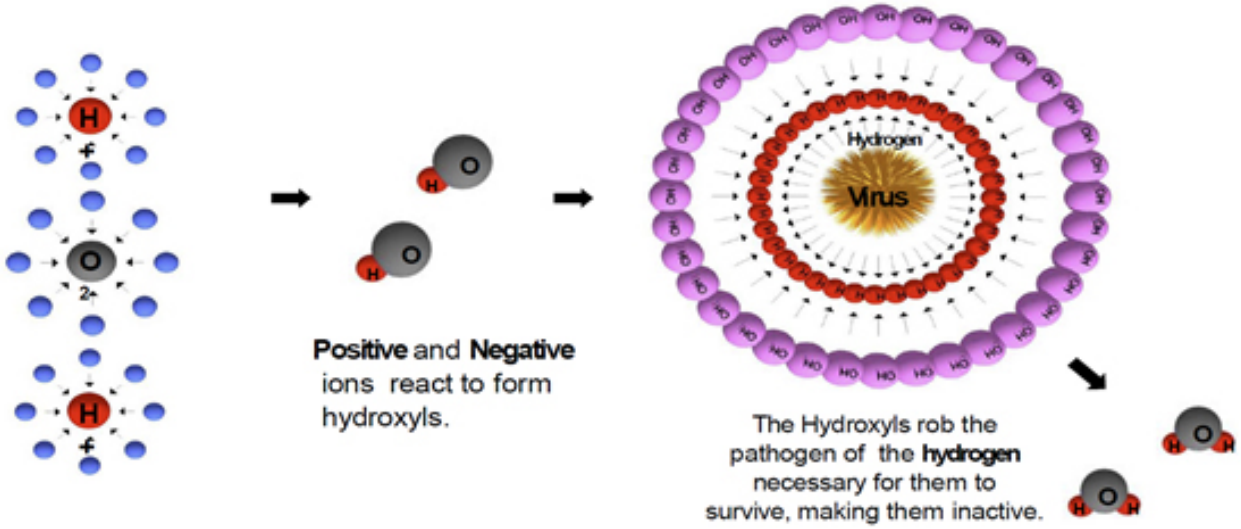
NPBI is a recently new technology which is attached to each HVAC unit on the rooftop of the church. NPBI technology works to safely clean the air inside buildings. It helps purify the interior air in two ways: 1) it increases particle size and so makes them easier to filter, and 2) it kills pathogens like air-borne bacteria and viruses, including COVID-19. NPBI is used by multiple cleanroom manufacturers as well as in hospitals, offices, airports, schools, arenas, airplanes, veterinary offices and more. It kills 98 percent of Covid-19 and most other airborne pathogens.

How does it work?

1) It makes Pathogens filterable:
GPS' NPBI technology works to safely clean the air inside buildings. It uses an electronic charge to create a plasma field filled with a high concentration of + and - ions. As these ions travel with the air stream they attach to particles, pathogens, and gas molecules, making them larger and filterable. Particles and pathogens are caught in the filtration system with NPBI technology.



2) It kills the Pathogens: As well, the ions kill pathogens by robbing them of life-sustaining hydrogen. The ions breakdown harmful Volatile Organic into harmless compounds like O2, CO2, N2, and H2O. The ions produced travel within the air stream into the occupied spaces, cleaning the air everywhere the ions travel, even in spaces unseen.



Is it safe?

Needlepoint bipolar ionization **(NPBI)**
is uniquely different from corona discharge ionization systems. NPBI does not use a dielectric. The power output is controlled to less than 12.07eV to **prevent the formation of ozone**. GPS' NPBI technology has been certified by UL 867 and UL 2998 as an ozone free technology. Therefore, ozone, aldehydes and ultra-fine particles are not created. NPBI has been used for particle reduction, odor control, pathogen control, energy savings and static electricity control for more than 10 years. Here are just some of the companies that currently use NPBI Technology in their facilities:

What else do we gain?

Odor Control – The ions produced by a NPBI device breaks down smelly and sometimes harmful gases by reducing them to compounds or molecules already prevalent in the atmosphere, including oxygen, nitrogen, water vapor and carbon dioxide.

Energy Savings via Outside Air Reduction –Currently the indoor air is filtered by diluting it with "clean" air the HVAC system brings in from outside. NPBI actually cleans the air inside instead of bringing in outside air. This results in energy savings because we don't need to cool or heat the outside air being brought inside.

How do we know it is working?

We will purchase a handheld sensor to measure the ions in the air. This will be compared to baseline data collected upon installation.

"About ten months ago this technology was installed in a downtown Atlanta homeless shelter operated by The Salvation Army. Every night the shelter allows up to 340 homeless people in. They are fed, allowed to shower and given a place to sleep. I attended an open house at this Salvation Army shelter. The Director of the shelter approached me. She exclaimed that they love the system. She said the odor in the building was gone. More importantly, was what she said about the flu season. In the past, because of the close quarters, almost everyone would get the flu. She said last flu season they only had a couple of cases."