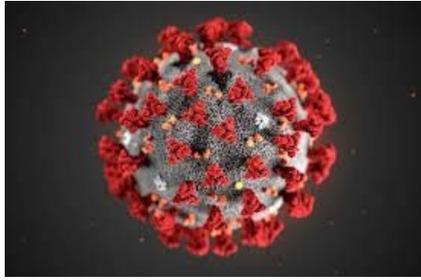


COVID-19: Combating an Invisible Enemy

A Case Study from a Specialist Cleaning Company



On the morning of Friday, March 20, 2020, the CFS office received a call with a concerned voice on the other end of the line. The voice was of one of our top clients voicing their concern about the immediate shut down of all nonessential businesses throughout the country. This client owns multiple buildings in many large metropolitan areas. They also manage individuals, large and small businesses, money and investments. One would think at first glance this business could temporarily

shut down as investments would be of little concern when families' health is at risk; however, this is by far from the truth.

What many don't realize, is within the skyscraper buildings this company owns, there is a secure floor that holds a data center. This room holds some of the most secure information within equipment that only the educated of this sector can maintain. Daily access of the data center by engineers, data specialist, and system security officers is required to ensure the data center and all its equipment is being maintained and operating correctly. From an outside perspective one would think these professionals aren't essential works, but to the contrary they are. As medical professionals tirelessly work to maintain the physical health of a country, these workers in data centers maintain the unseen world of technology which makes them extremely valued workers.

As the conversation continued that morning, the question that came from the other side is how we could clean the areas these essential workers would be in. This data center wasn't a small area, but an area that spanned nearly 30,000 square feet with 15' ceilings and hanging light fixtures. We were able to calm the client down and ensure them we would come in with proper protective gowning, gloves, and face masks, equipment and use only CDC and EPA approved cleaners to combat this virus.



While the client was closing their doors to the general public and telling all nonessential workers to go home, our team was preparing to go into the danger zone. There were several factors we were considering. Had one of the 800 employees in the clients building been exposed to the COVID-19 virus? Would the virus still be alive upon our arrival? Because of the sensitivity of the equipment and need for static disabling cleaners, could we mix the CDC

recommended cleaners with our data center approved cleaners?

The CFS project manager quickly got on the phone with one of our constituents who has 30 years of experience in the data center infrastructure world. They began researching, talking to our chemist who works directly with the CDC, and started preparations to combat the invisible enemy – COVID-19. We found you can mix a static dissipative solution with a few CDC and EPA recommended cleaners and not harm the near irreplaceable equipment in the data center. The CDC and EPA

recommend at least 70% alcohol content for disinfecting common surfaces – we decided to use a 75% alcohol along with a static dissipative solution for this clean.

One of our concerns was the discoloring of the equipment in the data center by using such a strong chemical. Another concern was using such a high alcohol content chemical around a highly flammable area. The heat that radiates off the continual run of the equipment is quite high, thus the



reason for the cooling systems in a data center. The closer you are to the equipment, the more heat you can feel. One air borne particulate from our chemicals could ignite and cause a catastrophic event.

The CFS project manager flew to the city where our crew and the clients building was located. The CFS crew arrived on site and suited up with all the necessary PPE (personal protective equipment) and signed in with the security office. Once they came to the doors of the data center room, the crew once again disinfected all their equipment before bringing anything into the actual data center room.



The first step was to use HEPA-filtered vacuums that trap 99.99% of air particulates. The equipment cabinets, walls, doors, light fixtures, floor and anything else within the data center was vacuumed. The crew then began wiping down every square inch of the data center with our cleaner that held a 75% alcohol content mixed with a static dissipative solution. At first, a small area was tested to ensure that no discoloration or reactions would take place. After waiting the proper time frame, no adverse reactions were noticed, and the crew was given notice that operations were to continue. The CFS team assembled ladders to reach the hanging light fixtures, which were wiped down with our disinfectant, as well as reach the tops of the server cabinets, CRAH units, PDU's and other standing equipment. CFS diligently worked wiping down walls, cables, wires, phones, desks and anything within the structure of the

room. Upon completion of the project the crew removed their PPE and placed everything into a biohazard bag for proper disposal, disinfected the equipment again.

After completion of the project a facility status report was generated for the client. Our client indicated the report would be read to their executive board of directors and mass emailed out to every employee that worked in the building. This report broke down the list of methods used during the entire disinfecting operation as well as SDS (safety data sheets) for the chemicals used to ensure complete disinfection of surface viruses. There was comfort on both sides knowing that the specialist having to go into the data center are now able to work in a clean environment without the worry of attracting the COVID-19 virus in their workplace.

It has now been several weeks since the disinfecting of their data center and no one that has entered the data center has had any symptoms of the COVID-19 virus. As the CFS team continues on assisting in the health and safety of data centers as well as offices nationwide, we can't help but think how this pandemic has truly changed, and will continue to change, the cleaning industry in data centers, offices, and common areas people walk thru.