## New UV Lighting System Provides Safe Environment at GPO

Whether you are at home, work, school, or another facility, the COVID-19 pandemic has really opened our eyes and brought awareness to indoor air quality. We know that indoor air quality can contribute to the health and safety of everyone as well as the function of pieces of equipment and structures. At GPO, improving the air that we breathe is a top priority. To help with this effort, Facilities has started installing ultraviolet (UV) lighting to provide a safe environment at GPO.

"During the start of COVID, we discussed a number of strategies, such as plexiglass borders and UV lighting systems to name a few," says Deputy Managing Director of Plant Operations Greg Estep. "UV lighting systems attracted our attention because the technology could provide an additional layer of protection."

"UV lighting systems improve the quality of life for our employees, tenants,

and visitors," says Chief of Facilities Management Michael Dietz. "We want to give them the best environment and give them some assurances that it's safe, and David has really done a great job on this." About 8 months ago, Facilities Supervisor David Gioffre, who manages the Power Branch, began talking to his team about options for improving safety through UV lighting systems. He began seeking out vendors, all on his own, and found one to come in to do this type of work. This multi-year project began with the first installment of UV lights being placed in the Proof Room. At present, Facilities is in the process of changing a lot of the air handlers out, buying new ones, and doing new HVAC designs and so forth. Ultimately, they plan to work on every air handler in the building.

UV light is a range of light frequencies that are mostly invisible to the human



Power Branch Supervisor David Gioffre talks about the new UV lighting system at GPO.



 $\ensuremath{\mathsf{UV}}$  lighting is used as a means to kill germs like bacteria and viruses.



Electrician William Russell shows that the UV lighting system is safe and secure.

eve and has many benefits. "What it is capable of doing is removing mold, viruses, and any kind of biological elements that would grow in a dark, cool environment like a chilled water coil," says Gioffre. "Those things aren't able to live with the UV lighting going across it, which is the reason for putting it on the coil." In exchange, it also cleans the coil and reduces maintenance on the units. "With the UV lights, we don't have to use coil cleaners or chemicals to clean the coil, which can get airborne in the units," says Gioffre. "The UV lighting will actually clean and disinfect the units and the air that comes through it. In return, it should cut down anything that is airborne within the space. It won't kill surfaces in the space, but the air coming out should be clean, filtered air with those UV lights."

GPO has anywhere from 10 to 15 air exchanges a day, which is the number of times air gets replaced in each room. "We have to have fresh air come into the building," says Gioffre. "The issue with that in the summer is that you've got to pull that hot, humid moisture out of the air. In the summer time, the air handlers work really hard on doing that." As fresh air comes into the building all of it gets filtered through these UV lights and basically it will clean the air. As we move to GPOSAFE Step 3, which is the agency's permanent operating status, Facilities is making sure that our teammates are breathing cleaner air.



Pictured from left to right: Building Management Specialist Andrew Watts, Power Branch Supervisor David Gioffre, Electric Branch Supervisor Robert Chaney, Electrician William Russell, and Electrician Darren Moody.



GPO's new UV lighting system is a preventative measure to protecting the air in the building.