"A Tale of Two Studies"

The following case studies involve a prominent New England remediation company, two highly visible research/educational facilities, and Foster Products Corporation. In both these instances, Foster® Fungicidal Protective Coating played an integral part in the remediation of a troublesome situation.

CASE #1

A major teaching hospital was experiencing mold contamination in one of its HVAC systems. This system serviced one of their educational laboratory spaces and was required to supply conditioned air at 60% relative humidity. For both thermal and acoustical controls, the system was internally insulated with fibrous glass.

The specification called for the thorough cleaning of the entire HVAC system including the units and all related supply ductwork. Following the cleaning process, the specification also required the resurfacing of the duct interior with an anti-microbial compound.

Cochrane Ventilation, Inc. secured the contract and started by establishing a negative air flow from the diffusers back through the unit. The filtered air was then exhausted outside the building. This procedure allowed the contractor to minimize the possibility of contamination migrating to the laboratory space during the course of work to be done. Access ports were established, so spaced as to allow for the HEPA vacuuming of the fibrous glass surface. Once the debris had been removed, Foster Fungicidal Protective Coating was applied to the insulation creating a new air erosion surface with residual fungicidal protection against future regrowth. Charles Cochrane, President of Cochrane Ventilation, stated "Foster's 40-20 was the product selected based on the available research and test data, as well as its ease of application and durability".

Following the work in the duct system, the laboratory space was decontaminated using a formaldehyde-wipe process coupled with a sealed aerosolization.

The combination of HVAC and room decontamination, coupled with the use of an anti-microbial agent proved to be an effective strategy for an environment where the humidity level had to be sustained at or above 60%. Follow-up air testing at 1, 6, and 12 month intervals revealed no elevated microbial levels compared to outside ambient covers.

With experience using 40-20, Cochrane Ventilation, Inc. surfaced a second opportunity wherein they felt the Foster material could be beneficial.

CASE #2

In 1995, a highly visible Northeastern research facility, specializing in cell culture, began discovering studies contaminated with bacteria and fungi from an unknown source. An exhaustive environmental analysis ensued revealing one primary contaminant source to be the facilities HVAC system. Standing water in the drip pans provided an amplification site for microbial growth. Moisture emanating from this collection point impacted the units fibrous glass lining, exacerbating the situation.

Built in the 1980's and designed to accommodate the needed isolation, each of the work areas and office spaces were given their own individual wall mounted HVAC systems. Supplementing this, the design included a perimeter hydronic system to assist in the winter months, and each laboratory had at least one fume hood with a dedicated make up air system. An evaluation of the buildings environmental requirements determined that the long term solution required abandoning the individual control units and engineering a new building wide system. While the long term solution had been decided upon, an intermediate plan of action had to be implemented.

Cochrane Ventilation, Inc. thoroughly decontaminated each HVAC unit including the blowers, fan scrolls, coils and condensate pans. The thermoaccustic liner was vacuumed and then resurfaced with an antimicrobial coating.

Evaluation of the decontamination process, as well as the products employed, were extensively scrutinized. The process had to be effective; there could be no negative impact on the indoor environment; and there could be no adverse interaction which could effect the lab processes taking place. The program would leave no residual materials on site with the exception of the antimicrobial coating applied to the surface of the insulation. Numerous products were evaluated and Mr. Cochrane chose to use Foster Fungicidal Protective Coating. "The decision to use 40-20 was based on its proven efficacy, durability, and compatibility with the building environment."

Follow up testing and evaluation of the remediated units demonstrated the ongoing effectiveness of the restoration process and products chosen.

Cochrane Ventilation, Inc. is a forty-five year indoor environmental remediation company based in Boston, MA and provides remediation and consulting services throughout the United States. Cochrane Ventilation, Inc. is certified by the National Air Duct Cleaners Association and Building Air Quality Alliance.

To learn more about the Indoor Air Quality materials manufactured by Foster Products Corporation or, speak with a Foster representative, call 800-999-2845.

Foster

REGISTERED COMPANY ISO 9001 SGS

601 West Campus Drive, Suite C7
Arlington Heights, IL 60004
Phone 800-231-9541
Fax 800-942-6856
Visit us on the web at www.fosterproducts.com

TOTSSTU