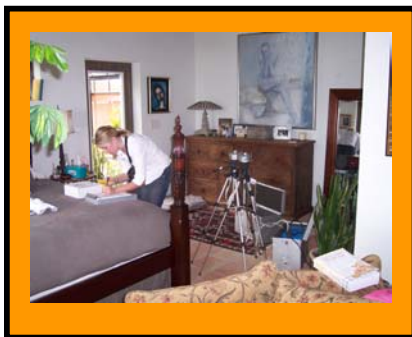


## INDOOR AIR QUALITY (IAQ) ASSESSMENT MOLD INVESTIGATION AND ABATEMENT PLANNING SERVICES

### BACKGROUND

Certified Environmental, Inc. (CEI) is staffed by Indoor Environmental Professionals, Environmental Scientists, and Industrial Hygienists that have conducted hundreds of mold inspections and IAQ investigations. CEI provides a range of services that address problems caused by indoor environmental pollutants. CEI's services include: building inspection and evaluation; ambient monitoring for chemical and biological contaminants, asbestos, radon, and mold; interpretation of findings; and suggested recommendations and engineering controls. CEI has responded to numerous complaints concerning IAQ in a wide variety of commercial and residential settings where the occupants were experiencing health problems appearing to be associated with air quality. IAQ surveys are performed in an attempt to identify the source or cause of the occupant complaints and then work to correct the problem.



### INDOOR AIR QUALITY

Indoor air quality is the subject of much attention these days, and for good reason. There is more and more evidence that the quality of the indoor environment can have profound effects on the health of building occupants. The World Health Organization estimates that up to 30 percent of office buildings worldwide may have significant problems.

Contaminants may originate from a variety of sources inside or outside the building. Airborne chemicals, bacteria, fungi, pollen, and dust may all contribute to the problem, as well as non-air quality factors such as temperature, humidity, lighting, noise, personal and work related stress, and pre-existing health conditions.

### FACTS ABOUT MOLD

Mold is present *everywhere* – indoors and outdoors. There are more than 100,000 species of mold, and at least 1,000 are common in the U.S. Some of the most commonly found types of mold include: *Cladosporium*, *Penicillium*, and *Aspergillus*.

When moldy material becomes damaged or disturbed, spores (reproductive bodies similar to seeds) can be released into the air. Exposure can occur if people inhale the spores or through direct contact. Inhalation of these molds can sometimes cause allergic reactions. Some molds, like *Stachybotrys* (i.e. black mold) and *Aspergillus versicolor*, are capable of producing airborne mycotoxins, which may cause more severe health problems for some people and are suspected to be carcinogenic (i.e. cancer causing).

### INDOOR MICROBIAL INVESTIGATION

CEI uses impaction cassette slides, agar plates, and a variety of other tools and instruments to perform the microbial assessment. The different sampling devices are specifically designed for the collection of airborne aerosols, including mold spores. Analysis is accomplished by an AIHA certified and accredited third-party laboratory, which participates in the Environmental Microbiology Proficiency Analytical Testing (EMPAT) program and is a member of the Environment Microbiology Laboratory Accreditation Program (EMLAP).

It has been extremely difficult for the Occupational Safety and Health Administration (OSHA) and other governmental agencies to establish a "safe" indoor air quality standard, because of all the varying factors that affect a person's susceptibility and variations in sampling techniques and procedures.

