



## **IEC Project Highlight** **LEED EQ Certification - San Antonio Military Medical Center**



Indoor Environmental Consultants, Inc. (IEC) provided LEED certification indoor environmental quality (IEQ) testing for the San Antonio Military Medical Center located at **Fort Sam Houston, Texas**. The military hospital consists of eight floors totally approximately 760,000 square feet, and is served by thirty eight (38) air handling units (AHUs). The air sampling was conducted during seventeen (17) site visits as building areas were completed and available for testing. A total of forty four (44) sample locations were tested during the course of the testing.

The **U. S. Army Corps of Engineers** through its general contractor **Clark/Hunt, Joint Venture** opted to obtain the LEED EQ Credit 3.2 for Construction Indoor Air Quality Management Plan: Before Occupancy by utilizing the testing option 2 under LEED for New Construction version 2.2 in lieu of a building flush-out due to occupancy deadlines and energy costs.



IEC successfully completed the sampling of the building according to LEED guidelines prior to the occupancy deadline. The sampling plan included a phased implementation of the air testing as the building areas became available, and were prioritized by Clark/Hunt project management based on expected completion dates. The intent of the phased implementation was to accommodate the occupancy of specific areas of the building prior to the full completion of other areas of the building. The 44 sampling locations were identified based on square footage served by HVAC air handling units and building configurations. For each portion of the building served by a separate ventilation system, the number of sampling points was not less than one per 25,000 square feet, or for each contiguous floor area, whichever was larger, and included areas with least ventilation and greatest presumed source strength.

The project met the LEED-established maximum concentration levels that must not be exceeded in order to meet certification criteria.

<b>Contaminant</b>	<b>Maximum Concentration **</b>
Formaldehyde	50 parts per billion (27 ppb in LEED 2009 NC)
Particulates (PM10)	50 micrograms per cubic meter
Total Volatile Organic Compounds (TVOC)	500 micrograms per cubic meter
* 4-Phenylcyclohexene (4-PCH)	6.5 micrograms per cubic meter
Carbon Monoxide	9 parts per million and no greater than 2 parts per million above outdoor levels