

## Hazardous Substance & Waste Management Research, Inc.

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**DATE:** 21 April 2023

**SUBJECT:** FSU Claude Pepper Center - Radon Evaluation

The Claude Pepper Center (Pepper) at Florida State University (FSU) has been evaluated for radon content due to indoor air quality questions that have been raised regarding other buildings on the FSU campus. From February 6 to 8, 2023, radon measurements were collected at seven (7) locations at Pepper. The 48-hour charcoal-liquid scintillation vial measurements were conducted by a state-certified radon contractor, in accordance with standard protocols of the United States Environmental Protection Agency (USEPA) and the Florida Department of Health (FDOH). Two of the radon values were greater than the 4 picoCurie/liter (pCi/L) USEPA Action Level (4.2 and 6.6 pCi/L), while the remaining results ranged from 2.0 to 2.9 pCi/L. Results for the February 2023 sampling event and two subsequent retests are summarized in the attached table.

Detectable radon levels are ubiquitous throughout the state, with most areas of Florida exhibiting low radon. Outdoor levels typically are in the 0.4 to 0.5 pCi/L range, and indoor levels regularly range from 1 to 2 pCi/L. Radon comes from decay of natural radium, and elevated indoor radon is related to local geology. Radon often is present in clays, phosphate rock, and igneous rocks, like granite, and can originate from bedrock far below land surface. Because it is a naturally occurring substance, exposure is common and unavoidable.

The data summarized herein reflected a condition that is consistent with many buildings in Florida and throughout the United States, and the radon conditions at Pepper did not represent a health concern. However, due to the detections at slightly greater than the 4 pCi/L USEPA Action Level, Pepper was resampled twice in April 2023. The results of the resampling were below the USEPA Action Level. The attached table has been updated to include the results of the continuous radon measurement (CRM) retests. Based on the results of the resampling, further investigation or other action regarding radon at the Claude Pepper Center is not deemed necessary at this time.

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## RADON MEASUREMENTS - Claude Pepper Center, Florida State University

Location	Sampling Dates	Number of Samples	<b>Min</b> pCi/L	<b>Max</b> pCi/L	Notes
1st Floor	06 to 08 Feb 2023	7	2.0	6.6	Two results > Action Level 4.0 pCi/L
1st Floor (CRM retest)	10 to 12 Apr 2023	Both results < 4 pCi/L, but less than half the original results, so third test required for confirmation per protocol - third test results provided below			
2nd Floor (CRM retest)	10 to 12 Apr 2023	One sample collected; < 4 pCi/L - 2nd floor cleared			
1st Floor (CRM retest confirmation)	18 to 20 Apr 2023	Both results $<$ 4 pCi/L - average of three tests $<$ 4 pCi/L (2.5 and 2.9 pCi/L) - 1st floor cleared			

pCi/L = picocuries per liter

Shaded results indicate the retest clearance sampling.