

Hazardous Substance & Waste Management Research, Inc.

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SUBJECT: FSU Roderick K. Shaw Building - Radon Evaluation

The Roderick K. Shaw Building (RSB) 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 January 9 to 11, 2023, radon measurements were collected at ten (10) locations at RSB. The 48-hour charcoal canister placement and collection were conducted under the supervision of 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 4.4 pCi/L), while the remaining results ranged from 2.1 to 3.8 pCi/L. Results for the January 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 RKB did not represent a health concern. However, due to the detections at slightly greater than the Action Level, RSB was resampled in March 2023 and again in April 2023. The attached table has been updated to include the results of the continuous radon measurement (CRM) retests, all of which were below the USEPA Action Level of 4 pCi/L. Based on the results of the resampling, further investigation or other action regarding radon at the Roderick K. Shaw Building is not deemed necessary at this time.

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RADON MEASUREMENTS - Roderick K. Shaw Building, Florida State University

Location	Sampling Dates	Number of Samples	Min pCi/L	Max pCi/L	Notes
1st Floor	09 to 11 Jan 2023	10	2.1	4.4	Two results > Action Level 4.0 pCi/L
1st Floor (CRM retest)	20 to 22 Mar 2023	Both results < 4 pCi/L (less than half original results, so third test required for confirmation per protocol - third test results provided below)			
2nd Floor (CRM retest)	20 to 22 Mar 2023	Both results < 4 pCi/L - 2nd floor cleared			
1st Floor (CRM retest confirmation)	03 to 05 Apr 2023	Both results $<$ 4 pCi/L - average of three tests $<$ 4 pCi/L (2.6 and 2.7 pCi/L) - 1st floor cleared			

pCi/L = picocuries per liter

Shaded results indicate the retest clearance sampling.