

Hazardous Substance & Waste Management Research, Inc.

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SUBJECT: FSU B.K. Roberts Hall - Radon Evaluation

B.K. Roberts Hall (Roberts) 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 13 to 15, 2023, radon measurements were collected at eight (8) locations at Roberts. 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 (4.5 and 4.1 pCi/L), while the remaining results ranged from 0.9 to 3.2 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 Roberts did not represent a health concern. However, due to the detections at slightly greater than the Action Level, Roberts was resampled in May 2023. The resampling included testing spaces on the floor above the areas exceeding the Action Level. 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 B.K. Roberts Hall is not deemed necessary at this time.

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RADON MEASUREMENTS - B.K. Roberts Hall, Florida State University

Location	Sampling Dates	Number of Samples	Min pCi/L	Max pCi/L	Notes
1st Floor	13 to 15 Feb 2023	8	0.9	4.5	Two results > Action Level 4.0 pCi/L
1st Floor (CRM retest)	8 to 10 May 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)	8 to 10 May 2023	Both results < 4 pCi/L - 2nd floor cleared			
1st Floor (CRM retest confirmation)	10 to 12 May 2023	Both results $<$ 4 pCi/L - average of three tests $<$ 4 pCi/L (2.3 and 2.0 pCi/L) - 1st floor cleared			

pCi/L = picocuries per liter

Shaded results indicate the retest clearance sampling.