

Hazardous Substance & Waste Management Research, Inc.

2976 Wellington Circle West Tallahassee, Florida 32309 Phone: (850) 681-6894 Fax: (850) 906-9777 www.hswmr.com

FROM: Dr. Christopher M. Teaf

President & Director of Toxicology

TO: James Stephens

Executive Director Utilities/Maintenance

Florida State University

DATE: 12 August 2022 (updated from 06 June 2022)

SUBJECT: FSU Kuersteiner Music Building - Radon Evaluation

The Kuersteiner Music Building (Kuersteiner) 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 May 24 to May 26, 2022, radon measurements were collected from 19 locations at Kuersteiner. The 48-hour charcoal canister measurements were collected 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). Each of the six basement samples exceeded the 4 picoCurie/liter (pCi/L) USEPA Action Level (range 4.1 to 9.6 pCi/L) for radon, while four of the eight 1st floor results exceeded the Action Level (range 0.8 to 10.1 pCi/L), and none of the five 2nd floor results exceeded the Action Level (range 2.5 to 3.8 pCi/L). Results for the May 2022 sampling event 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.

Although the occupational nature of potential exposures at Kuersteiner suggested no significant health concern for faculty, students, or visitors, the radon data summarized herein warranted further evaluation to determine the appropriate degree and methods for mitigation.

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In July 2022, the University proactively contracted for installation of a sub-slab depressurization radon mitigation system in Kuersteiner. The system was completed in late July 2022 and post-mitigation clearance sampling was conducted in early August 2022, in accordance with USEPA and FDOH protocols. The attached table has been updated to include those results, all of which were below the USEPA Action Level of 4 pCi/L. Based on the mitigation system installation and post-mitigation clearance testing, further investigation or other action regarding radon at Kuersteiner is not deemed necessary at this time.

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RADON MEASUREMENTS - Kuersteiner Building, Florida State University

Location	Sampling Dates	Number of Samples	Min pCi/L	Max pCi/L	Notes
Basement	24 to 26 May 2022	6	4.1	9.6	All results > 4 pCi/L Action Level
Basement (post-mitigation)	3 to 7 August 2022	7	0.7	3.9	No results > 4 pCi/L Action Level
1st Floor	24 to 26 May 2022	8	0.8	10.1	4 of 8 results > 4 pCi/L Action Level
1st Floor and above (post-mitigation)	3 to 7 August 2022	12	0.3	0.9	No results > 4 pCi/L Action Level
2nd Floor	24 to 26 May 2022	5	2.5	3.8	No results > 4 pCi/L Action Level

pCi/L = picocuries per literShaded results indicate the post-mitigation clearance sampling.