
HSWMR

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 Longmire Building - Radon Evaluation

The Longmire Building (Longmire) 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 12 locations at Longmire. 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). Four of the seven basement samples exceeded the 4 picoCurie/liter (pCi/L) USEPA Action Level (range 0.8 to 20.1 pCi/L) for radon, while none of the five 1st floor results exceeded the Action Level (range 0.3 to 2.2 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 Longmire 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.

In July 2022, the University proactively contracted for installation of a sub-slab depressurization radon mitigation system in Longmire. 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 Longmire is not deemed necessary at this time. It is noted that the mitigation contractor identified specific operation and maintenance requirements at Longmire (e.g., open door, turn off ventilation fan) that must be adhered to for the mitigation system to operate optimally.

RADON MEASUREMENTS - Longmire Building, Florida State University

Location	Sampling Dates	Number of Samples	Min pCi/L	Max pCi/L	Notes
Basement	24 to 26 May 2022	7	0.8	20.1	4 of 7 results > 4 pCi/L Action Level
Basement (post-mitigation)	3 to 7 August 2022	6	< 0.3	1.0	No results > 4 pCi/L Action Level
1st Floor	24 to 26 May 2022	8	0.3	2.2	No results > 4 pCi/L Action Level
1st Floor and above (post-mitigation)	3 to 7 August 2022	4	< 0.3	< 0.3	No results > 4 pCi/L Action Level

pCi/L = picocuries per liter

Shaded results indicate the post-mitigation clearance sampling.