HSWMR

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- **FROM:** Dr. Christopher M. Teaf President & Director of Toxicology
- TO: Laymon Gray Associate Director Environmental Health & Safety Florida State University
- **DATE:** 18 August 2023
- SUBJECT: FSU Middleton Golf Center Radon Evaluation

The Middleton Golf Center (Middleton) 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 August 01 to 03, 2023, radon measurements were collected at eleven (11) locations at Middleton. 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). All of the radon values were less than the 4 picoCurie/liter (pCi/L) USEPA Action Level (range of <0.4 pCi/L to 0.5 pCi/L). Results for the August 2023 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.

The data summarized herein reflect a condition that is consistent with many buildings in Florida and throughout the United States, and the radon conditions at the Middleton Golf Center do not represent a health concern. Further investigation regarding radon is not recommended at this time.

RADON MEASUREMENTS - Middleton Golf Center, Florida State University

Location	Sampling Dates	Number of Samples	Min pCi/L	Max pCi/L	Notes
First Floor	01 Aug to 03 Aug, 2023	9	< 0.4	0.5	No results > 4 pCi/L
Second Floor	01 Aug to 03 Aug, 2023	2	< 0.4	< 0.4	No results > 4 pCi/L

pCi/L = picocuries per liter