

Hazardous Substance & Waste Management Research, Inc.

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SUBJECT: FSU National High Magnetic Field Laboratory - Radon Evaluation

The National High Magnetic Field Laboratory (MagLab) 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 March 9 to March 11, 2022, radon measurements were collected at 32 ground floor locations from three areas of the MagLab complex [the General Science area (Building 0022), the DC Magnet building (Building 0069), and the Nuclear Magnetic Resonance building (NMR/Building 0269)]. 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). None of the radon values at any location were greater than the 4 picoCurie/liter (pCi/L) USEPA Action Level (range 0.4 to 0.5 pCi/L). All results for the March 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.

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 MagLab complex do not represent a health concern. Further investigation regarding radon is not recommended at this time.

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RADON MEASUREMENTS - MagLab Complex, Florida State University

Complex Location	Sampling Dates	Number of Samples	Min pCi/L	Max pCi/L	Notes
Bldg 0069 1st Floor	9 to 11 Mar 2022	6	0.4	0.5	No results > 4 pCi/L
Bldg 0022 1st Floor	9 to 11 Mar 2022	20	0.4	0.4	No results $> 4 \text{ pCi/L}$
Bldg 0269 1st Floor	9 to 11 Mar 2022	6	0.4	0.4	No results $> 4 pCi/L$

pCi/L = picocuries per liter