

Hazardous Substance & Waste Management Research, Inc.

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SUBJECT: FSU Dick Howser Stadium - Radon Evaluation

Dick Howser Stadium (Howser) 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 July 5 to 7, 2023, 48-hour charcoal canister radon measuring devices were deployed at seven (7) locations at Howser. The testing was conducted 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 radon values were below the 4 picoCurie/liter (pCi/L) USEPA Action Level (range of < 0.4 to 0.6 pCi/L), but three results were reported as "invalid" due to excessive weight of the canisters. This typically occurs when humidity levels are elevated in the testing location. The locations of the invalid results were retested from July 18 to 20, 2023 using continuous radon monitoring (CRM) devices. The CRM protocol is less susceptible to high humidity environments, and produces a more reliable average view (consisting of 48 hourly subsamples for the final reported average result). All of the CRM results were below the Action Level (range of 0.6 to 1.6 pCi/L). Results for the July 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.

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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 Dick Howser Stadium do not represent a health concern. Further investigation regarding radon is not recommended at this time.

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RADON MEASUREMENTS - Dick Howser Stadium, Florida State University

Location	Sampling Dates	Number of Samples	Min pCi/L	Max pCi/L	Notes
First Floor	05 Jul to 07 Jul 2023	4 *	< 0.4	0.6	No results > 4 pCi/L
First Floor retests	18 Jul to 20 Jul 2023	3	0.6	1.6	No results > 4 pCi/L

pCi/L = picocuries per liter

^{*} Seven samples were collected, but three were flagged by the lab as invalid due to excessive weight of the canister (see text for details). Those locations were retested as shown.