

Hazardous Substance & Waste Management Research, Inc.

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SUBJECT: FSU Osceola Duplex Building - Radon Evaluation

The Osceola Duplex Building (Osceola) 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 September 19 to 21, 2023, radon measurements were collected at four locations at Osceola. The 48-hour charcoal canister placement and collection were conducted under the supervision of 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). The results for the original September 2023 sampling showed two locations below the USEPA Action Level of 4 picoCurie/liter (pCi/L; 2.1 and 2.6 pCi/L) and two locations at or slightly greater than the Action Level (4.0 and 4.2 pCi/L). The exceedances occurred in the vacant, unoccupied unit of the duplex.

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 reflected a condition that is consistent with many buildings in Florida and throughout the United States, and the radon conditions at Osceola did not represent a health concern. However, due to the initial detections at slightly greater than the Action Level, Osceola was retested in January 2024. The attached table presents the original September 2023 results as well as the January 2024 continuous radon measurement (CRM) retests. The two locations in the vacant unit again exceeded the Action Level (5.5 and 6.2 pCi/L). In the event that use or building conditions change significantly at the Osceola Duplex, it may be appropriate to evaluate the building for potential radon mitigation.

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RADON MEASUREMENTS - Osceola Duplex Building, Florida State University

Location	Sampling Dates	Number of Samples	Min pCi/L	Max pCi/L	Notes
1st Floor	19 to 21 Sep 2023	4	2.1	4.2	Two locations > Action Level 4.0 pCi/L
1st Floor (CRM retest of Action Level exceedances)	17 to 19 Jan 2024	2	5.5	6.2	Two locations > Action Level 4.0 pCi/L

pCi/L = picocuries per liter