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SUBJECT: FSU Stone Building - Radon Evaluation

The Stone Building (Stone) 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 January 9 to 11, 2023, radon measurements were collected at twenty-four locations at Stone. The 48-hour charcoal canister measurements were 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). None of the fourteen ground floor locations exceeded the 4 picoCurie/liter (pCi/L) USEPA Action Level (range of <0.4 pCi/L to 1.2 pCi/L). Four of the ten 1st floor (ground contact) radon values (range of 4.5 pCi/L to 5.7 pCi/L) slightly exceeded the USEPA Action Level, while the remaining results ranged from 0.6 pCi/L to 3.1 pCi/L. The four elevated 1st floor locations were retested from March 20 to 22, 2023, and three of the four results again exceeded the USEPA Action Level. Per FSU protocol, select 2nd floor locations also were tested in March 2023. All 2nd floor locations were less than the USEPA Action Level, so additional testing of the 2nd floor was deemed unnecessary. Results for the January and March 2023 sampling events 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 Stone 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 May 2023, the University proactively contracted for installation of a sub-slab depressurization radon mitigation system for the Stone Building. The system was completed in August 2023 and post-mitigation clearance sampling was conducted in September 2023, in accordance with USEPA and FDOH protocols. The attached table has been updated to include those results, all of which were less than 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 the Stone Building is not deemed necessary at this time. The Stone Building will be placed on the mitigation system maintenance and annual radon monitoring schedule, in accordance with FDOH guidance and FSU policy.

RADON MEASUREMENTS - Stone Building, Florida State University

Location	Sampling Dates	Number of Samples	Min pCi/L	Max pCi/L	Notes
Ground Floor	09 to 11 Jan 2023	14	<0.4	1.2	No results > Action Level 4.0 pCi/L; Ground Floor Cleared
1st Floor	09 to 11 Jan 2023	10	0.6	5.7	4 results > Action Level 4.0 pCi/L
1st Floor Retest	20 to 22 Mar 2023	4	3.4	7.4	3 results > Action Level 4.0 pCi/L
2nd Floor Retest	20 to 22 Mar 2023	3	1.4	3.2	No results > Action Level 4.0 pCi/L; 2nd Floor Cleared
1st Floor (post-mitigation)	19 to 21 Sep 2023	4 of 4 samples < 4 pCi/L - 1st Floor Cleared			

pCi/L = picocuries per liter

Shading indicates clearance testing results.