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SUBJECT: FSU Dodd Hall - Radon Evaluation

Dodd Hall 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. Initial radon testing was conducted from May 23 to May 25, 2022, at 24 locations at Dodd Hall. 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). One of the radon values (4.2 pCi/L) was slightly greater than the 4 picoCurie/liter (pCi/L) USEPA Action Level. The other results ranged from 0.6 to 3.7 pCi/L. It is noted that the Action Level primarily is directed at evaluation of indoor air in residential circumstances when 24-hour exposures are assumed. The Action Level is employed by FSU here as a conservative point-of-departure. The workplace protection level from OSHA (Occupational Safety and Health Administration) is 100 pCi/L.

Due to the detection in one sample at slightly greater than the Action Level, the location of the elevated detection at Dodd Hall was resampled from July 29, 2022 to August 1, 2022, using a Continuous Radon Monitoring (CRM) device. The CRM protocol, which provides a different perspective and produces a more reliable average view of radon conditions (consisting of 48 hourly subsamples for the final reported average result), returned a result (1.8 pCi/L) that was well below the Action Level, so the building was removed from further evaluation at that time.

Because of the one-time Action Level exceedance, Dodd Hall was placed on the annual maintenance and monitoring program with respect to radon, in accordance with FDOH guidance and FSU policy. The 2023 annual follow-up testing for Dodd Hall was conducted in June and July 2023. Although the initial follow-up annual test result on

June 7, 2023 (4.7 pCi/L) was slightly greater than the Action Level, two subsequent retests (1.1 pCi/L on June 28, 2023 and 0.8 pCi/L on July 18, 2023) were less than the Action Level, as was the average of the three tests (2.2 pCi/L).

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 Dodd Hall do not represent a health concern. The attached table summarizes all of the radon testing that has been conducted at Dodd Hall to date. The annual testing program for Dodd Hall will be continued per the FSU protocol.

RADON MEASUREMENTS - Dodd Hall, Florida State University

Location	Sampling Dates	Number of Samples	Min *pCi/L*	Max *pCi/L*	Notes
1st Floor	23 to 25 May 2022	12	0.6	4.2	One result > Action Level 4.0 pCi/L
2nd Floor	23 to 25 May 2022	12	0.6	1.4	No results > 4.0 pCi/L
1st Floor (CRM retest)	29 Jul to 1 Aug 2022	1	1.8	1.8	No result > 4.0 pCi/L
Annual Follow-Up Testing					
2023	Original elevated location tested in June and July 2023: results were 4.7 pCi/L (07 Jun 2023), 1.1 pCi/L (28 Jun 2023), and 0.8 pCi/L (18 Jul 2023) for an average of 2.2 pCi/L				

pCi/L = picocuries per liter
Shaded results indicate the retest clearance sampling.