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INDUSTRIAL HYGIENE REPORT

RADON TESTING REPORT

Lancaster Professional Center

Report by: Vonnie B. Good, Environmental Safety Specialist
Salem Keizer School District

On-site: March 17-20, 2015

Report: March 24, 2015

PURPOSE

Radon testing was done to measure the background levels in all offices and staff work rooms that are in contact with the ground.

TEST METHOD

Radon Air-Chek short-term test devices were used in each location by placing the device 5-6 feet above the floor where it is not in direct contact with airflow from the ventilation system or exterior doors.

These short-term devices work by trapping room air inside the grains of charcoal within the devices, meaning that live radon gas is being captured. The analysis is performed by measuring the radiation emitted from the charcoal, which is proportional to the amount of radon that was present in the room air.

The testing occurred from Tuesday, March 17 to Friday, March 20, 2015, during normal and routine operations in the building.

EPA RADON GUIDELINES

The EPA has set an Action Level of 4.0 pCi/L (picoCuries per liter) for schools, businesses and homes. If buildings have radon levels at or above 4.0 pCi/L, EPA recommends actions should be taken to reduce the level. These actions include:

- Step 1. If your result is 4.0 pCi/L or higher, take a follow-up test (Step 2) to be sure.
- Step 2. Follow up with either a long-term test or a second short-term test.

RESULTS and RECOMMENDATION

No test locations were above the EPA's Action Level of 4.0 picoCuries per liter (pCi/l).

BACKGROUND ON RADON

Radon is a gas that occurs in nature, seeping up from the earth. It is odorless, colorless and tasteless. Radon comes from the natural breakdown, or radioactive decay, of uranium 238. The half-life of an individual element is relatively short. Within two weeks, about 90% of a given amount of radon gas will be gone. However, the actual health concern is for the radon decay products, called radon progeny, which carry a small static charge that allows their attachment to water vapor, dust and smoke particles in the air.

The Radon progeny can become lodged in the lung tissue when they are inhaled, and it is these particles' further radiation decay that is associated with potential lung cancer effects.

Radon can seep into buildings or schools through cracks in slab floors or porous cinderblock. It can enter around loose-fitting drainage pipes or through sump pumps.

The US EPA has set an Action Level of 4.0 pCi/L. At or above this level of radon, the EPA recommends that corrective measures should be taken to reduce the exposure to radon gas.

CONTROL OF RADON LEVELS IN SCHOOL BUILDINGS

The major control mechanism for lowering radon levels within buildings is use of dilution ventilation. If the amount of outside air delivered into a building increases, the radon levels should decrease.

Sample Data Attached

March 23, 2015

**** LABORATORY ANALYSIS REPORT ****

Radon test result report for:

SCH ADM

LPC

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7030201	APPLICATION CENT	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	1.6	2015-03-23
7030209	ASSISTANT SUPERI	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	1.4	2015-03-23
7030210	BENEFITS	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	1.4	2015-03-23
7030205	BUDGET ANALYST	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	1.3	2015-03-23
7030207	CLASSIFIED OFFIC	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	0.7	2015-03-23
7030221	CTE COORD	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	< 0.3	2015-03-23
7030204	DIR OF EMPLOYEE	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	1.1	2015-03-23
7030220	DIRECTOR OF INST	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	0.6	2015-03-23
7030216	ELEM ED DIRECTOR	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	0.8	2015-03-23
7030217	ELEM ED DIRECTOR	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	1.4	2015-03-23
7030219	HIGH SCHOOL DIRE	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	0.6	2015-03-23
7030208	HR SUPPORT	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	< 0.3	2015-03-23
7030203	LIS	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	0.9	2015-03-23
7030218	MIDDLE SCHOOL DI	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	0.8	2015-03-23
7030224	MUSIC AND THEATE	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	0.8	2015-03-23
7030211	POSITION CONTROL	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	1.1	2015-03-23
7030212	PREVENTIONP	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	1.0	2015-03-23
7030226	PROFESSIONAL DEV	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	1.0	2015-03-23
7030202	RECRUITING	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	0.8	2015-03-23
7030225	RISK MANAGEMENT	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	< 0.3	2015-03-23
7030223	RISK MANAGER	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	0.6	2015-03-23
7030214	STAFF IMPROVEMEN	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	0.8	2015-03-23
7030213	STAFF QUALITY	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	0.6	2015-03-23
7030206	SUB OFFICE	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	0.6	2015-03-23
7030215	SUITE 125 CONF R	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	< 0.3	2015-03-23
7030222	TESTING EV	2015-03-17 @ 9:00 am	2015-03-20 @ 10:00 am	< 0.3	2015-03-23