INDUSTRIAL HYGIENE REPORT

RADON TESTING REPORT

West High School

Report to: Vonnie B. Good, EHS Salem Keizer School District
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On-site: March 20-23, 2017
Report: April 10, 2017

PURPOSE

After initial testing showed radon levels above EPA's Action Level of 4.0 picoCuries/L (pCi/L) in a number of rooms at West High School, a radon mitigation system was installed in July of 2013. To ensure that the systems are functioning properly and levels are well below EPA's Action Level, annual radon testing is performed.

CONCLUSION and RECOMMENDATION

All tested locations had levels of radon below the EPA recommended level however, office 105A did have radon levels above the School District's trigger to retest.

Recommend retest office 105A after increasing the amount of outside air provided to the room via the ventilation system.

TESTING

Radon testing was conducted using protocols recommended by the Oregon Health Authority per ORS 332.166-.167. Radon Air-Chek short-term test devices were used in the rooms by suspending the device in each room. The testing occurred from March 20-23, 2017, during normal and routine school ventilation system operation, as well as with the radon mitigation system in operation.

Quality assurance testing was also conducted by utilizing blank, duplicate, and spiked samples per the recommendations found in ORS 332.166-.167. The test kit labeled "Check In 1" is the blank. It tested at <0.3 pCi/L, confirming the lab results.

EPA RADON GUILDELINES

The EPA has set an Action Level of 4.0 pCi/L (picoCuries per liter) for schools. If classrooms or buildings have radon levels at or above 4.0 pCi/L, EPA recommends that schools take action 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.

The World Health Organization has set their action level at 2.7 pCi/L. Salem Keizer School District has determined that 2.7 pCi/L is a target level where retesting should be done.

CONTROL OF RADON LEVELS IN SCHOOLS

The major control mechanism for lowering radon levels within school buildings is the use of dilution ventilation. If the amount of outside air delivered into a building increases, the radon levels should decrease. In this case, increased ventilation wasn't sufficient. Therefore, a subslab depressurization system was installed in Room B117.

Sample Data Attached

Radon test result report for:
SK
WEST

Kit #	Room Id	Started	Ended	pCi/L	Analyzed
7854754	B105	2017-03-20 @ 9:00 am	2017-03-23 @ 10:00 am	2.1 ± 0.2	2017-03-24
7854753	B105	2017-03-20 @ 9:00 am	2017-03-23 @ 10:00 am	2.3 ± 0.3	2017-03-24
7854757	B105A	2017-03-20 @ 9:00 am	2017-03-23 @ 10:00 am	2.8 ± 0.3	2017-03-24
7854756	B105B	2017-03-20 @ 9:00 am	2017-03-23 @ 10:00 am	1.7 ± 0.2	2017-03-24
7854755	B105C	2017-03-20 @ 9:00 am	2017-03-23 @ 10:00 am	2.2 ± 0.2	2017-03-24
7854752	B117	2017-03-20 @ 9:00 am	2017-03-23 @ 10:00 am	< 0.3	2017-03-24
7854758	CHECK IN 1	2017-03-20 @ 9:00 am	2017-03-23 @ 10:00 am	< 0.3	2017-03-24