# INDUSTRIAL HYGIENE REPORT

# RADON TESTING REPORT

# West High School Room B105

Report to: Vonnie B. Good, EHS Salem Keizer School District By: Kathy Ellis, Senior Industrial Hygiene Consultant Reviewed By: DeEtta Burrows, MSPH, CIH - Wise Steps, Inc.

> On-site: April 4-7, 2016 Report: April 12, 2016

### **PURPOSE**

Radon monitoring was done to measure the background levels in Classroom B105 and the Teacher's office, B105A, to determine if the radon levels are below the EPA's Action Level after installation of the radon mitigation system for Classroom B117.

#### CONCLUSION AND RECOMMENDATION

The office B105A still had elevated radon levels similar to the findings in January. The April test measured 4.6 pCi/L and in January the level was @4.7 pCi/L. The classroom B105 had a lower amount of radon compared to the office and the measurements done in January. The classroom B105 in April had 2.6 pCi/L and in January the level was @3.7 pCi/L.

It is recommended that the operation of the ventilation systems for the classroom and office should be checked to make sure that the amount of outdoor air supplied has not been shut off. If possible increase the amount of outdoor air to these rooms, then retest these rooms for radon levels.

## **TESTING**

Radon Air-Chek short-term test devices were used in the rooms by suspending the device in each room. The testing occurred from April 4-7, 2016, during normal and routine school ventilation system operation, as well as with the radon mitigation system in operation in room B117.

# **EPA RADON GUILDELINES**

Salem Keizer School District has determined that 2.7 pCi/L is a target level where retesting should be done.

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:

# 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. A subslab depressurization system was installed in in this school at classroom B117.

# Sample Data Attached

Radon test result report for:

SK WEST

Room Id	Started	Ended	pCi/L	Analyzed
105	2016-04-04 @ 10:00 am	2016-04-07 @ 10:00 am	$2.6 \pm 0.3$	2016-04-08
105A	2016-04-04 @ 10:00 am	2016-04-07 @ 10:00 am	$4.6 \pm 0.3$	2016-04-08
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