

Harrisburg School District

Healthy and Safe Schools Plan

A. Tom Dentel – Maintenance Supervisor is responsible for maintaining and implementing the Healthy and Safe Schools Plan. His contact information is 541-995-6626.

B. List of facilities that are included in the plan:

- A. Elementary School
642 Smith Street
- B. Middle School
201 South Sixth Street
- C. High School
400 South 9th Street
- D. District office
864 LaSalle Street

C. **Radon** testing plan

1. A Test Kit Placement Log and a Test Kit Location Floor Plan will be prepared for each school in which radon measurements are made. Schools will use their emergency/fire escape plan as a template. Test kit location will be accurately recorded on both a Log and Floor Plan. Test kits or testing services must meet the current requirements of the national certifying organizations, National Radon Proficiency Program (NRPP, www.nrpp.info) or the National Radon Safety Board (NRSB, www.nrsb.org). Testing must be done following the directions on the test kit.
2. Per ORS 332.166-167, school radon measurement teams must, at a minimum, conduct initial measurements in all frequently occupied rooms in contact with the soil or located above a basement or a crawlspace. Room examples include offices, classrooms, conference rooms, gyms, auditoriums, cafeterias and break rooms.
3. The number of test kits used to measure radon (detectors) must be determined by counting the number of appropriate rooms. One detector kit is used for each room that is 2,000 square feet or less. Additional test kits are needed for larger rooms.
4. Added to this number will be the test kits needed for Quality Assurance purposes.
5. Test kits will be placed in all rooms in contact with the soil or located above a basement or crawlspace that are frequently occupied by students and school staff.
6. Testing will occur during the time that students and teachers are normally present (during weekdays).

7. In addition to placing detectors, additional test kits will be provided to serve as quality assurance measures (duplicate, blank, and spike measurements). Quality Assurance procedures will be conducted as described in OHA's [Testing for Elevated Radon in Oregon Schools](#).
8. All test kits placed in the school site (detectors, duplicates, and blanks) must be noted on the Device Placement Log and Floor Plan by their serial number.
9. Test kits should be placed.
 - a. Where they are least likely to be disturbed or covered up.
 - b. At least three feet from doors, windows to outside or ventilation ducts.
 - c. At least one foot from exterior walls.
 - d. At least 20 inches to six feet from floor.
 - e. About every 2,000 square feet for large spaces (e.g., a 3500 square foot gymnasium would require two test kits)

Along with the five-item placement protocol above, School Radon Measurement Teams can simply place the test kit on the teacher's desk or up on a bookshelf, out of the way of students. To prevent tampering, kits may be suspended from a wall or ceiling (using string and thumb-tack/tape). If they are suspended, they should be 20 inches to 6 feet above the floor, at least 1 foot below the ceiling.

10. Test kits must **NOT** be placed:
 - a. Near drafts resulting from heating, ventilating vents, air conditioning vents, fans, doors, and windows.
 - b. In direct sunlight.
 - c. In areas of high humidity such as bathrooms, kitchens, laundry rooms, etc.
 - d. Where they may be disturbed at any time during the test
11. Testing with short-term test kits must be used under closed conditions (closed windows/doors except for normal exit/entry).
 - a. Closed conditions: Short-term tests should be made under closed conditions in order to obtain more representative and reproducible results. Open windows and doors permit the movement of outdoor air into a room. When closed conditions in a room are not maintained during testing, the subsequent dilution of radon gas by outdoor air may produce a measurement result that falls below the action level in a room that actually has a potential for an elevated radon level. Schools shall only be tested for radon during periods when the HVAC system is operating as it does normally.

- b. All external doors should be closed except for normal use – structural and weatherization defects need to be repaired prior to testing.
- c. Closed conditions must be verified when placing and retrieving test kits.

12. Short-term test kits will be placed during colder months (October through March).

- a. Colder months: Because testing under closed conditions is important to obtain meaningful results from short-term tests, the District will schedule testing during the coldest months of the year. During these months, windows and exterior doors are more likely to be closed. In addition, the heating system is more likely to be operating. This usually results in the reduced intake of outside air. Moreover, studies of seasonal variations of radon measurements in schools found that short-term measurements may more likely reflect the average radon level in a room for the school year when taken during the winter heating season.
- b. The District will check and document local weather forecasts prior to placing test kits. Do not conduct short-term measurements (2-5 days) during severe storms or period of high winds. The definition of severe storm by the National Weather Service is one that generates winds of 58 mph and/or $\frac{3}{4}$ inch diameter hail and may produce tornadoes.

13. Test Kits will be placed during weekdays with HVAC (heating, ventilation, air conditioning) systems operating as they do normally.

Suggested timeline:

Monday morning – Place kits (detectors/duplicates/blanks) per Test Kit Placement Log created for school. Record data, as needed, on Log.

Thursday morning – Pick up kits, record as needed, ship with (previously requested & received) spiked test kits to Radon Measurement Laboratory.

- a. Air conditioning systems that recycle interior air may be operated.
- b. Window air conditioning units may be operated in a re-circulating mode, but must be greater than 20 feet from the test kit.
- c. Ceiling fans, portable humidifiers, dehumidifiers and air filters must be more than 20 feet from the test kit.
- d. Portable window fans should be removed or sealed in place.
- e. Fireplaces or combustion appliances (except for water heaters/cooking appliances) may not be used unless they are the primary source of heat for the building.
- f. If radon mitigation systems are in place in the school, they should be functioning.

14. The District will not conduct initial measurements under the following conditions:

- a. During abnormal weather or barometric conditions (e.g., storms and high winds). If major weather or barometric changes are expected, it is recommended that the 2 to 5-day testing be postponed. USEPA studies show that barometric changes affect indoor radon concentrations. For example, radon concentrations can increase with a sudden drop in barometric pressure associated with storms.
 - b. During structural changes to a school building and/or the renovation of the building's envelope or replacement of the HVAC system
15. After receiving the results of the initial testing, School Radon Measurement Teams will follow the "Interpreting initial results" section of the OHA's Testing for Elevated Radon in Oregon Schools.

Follow-up Measurements

Follow-up testing (in rooms with initial short-term measurement of 4.0 pCi/L or higher) should start within one month after receiving the initial test results. Follow-up testing must be made in the same location in a room. When conducting follow-up testing using short-term methods will be done in the same conditions as the initial measurement. Follow-up testing using passive short-term test kits should follow the same Quality Assurance procedures and requirements (i.e. percentages of duplicates/blanks/spikes), including quality assurance calculations. Follow directions under Radon Test Placement Strategy and Protocol Checklist and Test Kit Placement again.

Report of Results and Distribution

ORS 332.166-167 requires that school districts make all test results available: to the district's school board; the Oregon Health Authority (to post on its website), and readily available to parents, guardians, students, school employees, school volunteers, administrators and community representatives at the school office, district office or on a website for the school or school district.

US EPA, OHA Oregon Radon Awareness Program, and numerous non-governmental groups recommend that the school district take action to reduce the radon level in those rooms where the average of the initial and follow-up short-term kit results OR the result of the long-term kit used in follow-up is 4.0 pCi/L or more.

Initial testing will be conducted in accordance with ORS 332.166-167 before January 1, 2021. Because buildings age and ground beneath them settles, radon entry may increase due to cracks in the foundation. For that reason, ORS 332.166-167 requires that schools be tested once every 10 years regardless of initial testing results or whether mitigation was done.

Suggested times, for retesting, in addition to that required under ORS 332.166-167, are as follows:

1. Current national guidelines (ANSI/AARST, 2014) recommend that school buildings be re-tested every five years.
2. If radon mitigation measures have been implemented in a school, retest these systems as a periodic check to ensure that the radon mitigation measures are working. EPA does not provide a specific interval, but OHA recommends that schools with radon mitigation measures retest every 5 years.

3. Retest after major renovations to the structure of a school building or after major alterations to a school's HVAC system. These renovations and alterations may increase radon levels within a school building.
 4. If major renovations to the structure of a school building or major alterations to a school's HVAC system are planned, retest the school before initiating the renovation. If elevated radon is present, radon-resistant techniques can be included as part of the renovation.
- D. Plan to test for and reduce exposure to **lead in water** used for drinking and food. *The Oregon Department of Education and the Oregon Health Authority recommend that all school districts and childcare facilities test for lead in school water and take corrective action if lead levels are elevated.*

In developing a plan to test for and reduce exposure to lead in water used for drinking or food preparation, the following components are recommended by the Oregon Department of Education and the Oregon Health Authority:

1. **Identify sources of lead:** *Schools and childcare facilities should test all taps used for drinking or food preparation in the building to identify any lead problems. Follow the Environmental Protection Agency's 3 T's Revised Technical Guidance to ensure that samples for lead are collected properly and from the right places. Use an OHA-accredited drinking water laboratory to analyze samples for lead.*
2. **Stop access:** *Prevent access to water taps that have more than 20 parts per billion (ppb) of lead. This should include shutting off taps, covering water fountains, and providing bottled water to students and staff members.*
3. **Communicate:** *Make results from tests for lead in water available to students, families, and the community as quickly as possible.*
4. **Mitigate and correct:** *Replace the sources of lead in building plumbing. Again, EPA 3T's Guidance should be followed.*

The EPA's 3Ts technical guidance is available here:
https://www.epa.gov/sites/production/files/2015-09/documents/toolkit_leadschools_guide_3ts_leadschools.pdf

- E. Plan to reduce exposure to **lead paint** that includes the following compliance with the United States Environmental Protection Agency's Renovation, Repair and Painting Program Rule. In order to comply with the United States Environmental Protection Agency's Renovation, Repair and Painting Program Rule, the district will contract with certified contractors to perform the work.

- F. Plan to implement **integrated pest management** practices as required under ORS 634.700 through 634.750.
Tom Dentel and Gordon Hentze are attending the Oregon State University Integrated Pest Management IPM workshops held during the year. They will make sure that we are following the IPM guidelines when eliminating pests in the school district.
- G. Plan to **communicate** results for all tests required under Healthy and Safe Schools Plan.
1. The school district must make all test results available to the public within five business days of receiving the results;
 2. The school district must make the results available to the public by posting results on the school district website, sending notice of the results over the email system, and making the results available in hardcopy at the main administration office;
 3. The school district must provide detailed information explaining the test results.
- H. School districts must annually provide a statement regarding **the Healthy and Safe Schools Plan**.
1. The annual statement will be on the website and available at each buildings main office.
 - a. The annual statement must include the person responsible for maintaining and implementing the plan.
 - b. How to obtain a copy of the Safe and Healthy Schools Plan.
 - c. A certification that the Healthy and Safe Schools Plan is up to date and that all required testing has been completed
 - d. How to access any results for tests conducted pursuant to the Plan
 - e. A summary of major mitigation efforts in the last year as a result of the Healthy and Safe Schools Plan.

To see the results of the testing, please visit:

<http://geo.maps.arcgis.com/apps/MapSeries/index.html?appid=6a4f2b6001bd474ca7d0a7f0c2552f57>