



# Marine Corps Logistics Base Albany Radon Survey and Results - FAQs

## Understanding Radon

### Q. What is radon?

A. Radon is a naturally occurring colorless, odorless, tasteless gas that is produced by the radioactive decay of naturally occurring uranium, which is a common component of the soil and rocks under homes and buildings around the world. Radon is present in outdoor air but is diluted by the atmosphere and is relatively harmless. However, sometimes in enclosed places, radon can accumulate to levels prompting corrective action.

### Q. Is radon dangerous?

A. Long term exposure to elevated levels of radon gas can potentially impact health over time.

### Q. How does radon enter a building?

A. There are a variety of ways that radon gas may enter a building. Most commonly, radon enters through openings in a building's foundation such as joints, cracks, or other openings to the underlying soil. In addition, improperly balanced or improperly designed HVAC systems, use of exhaust systems with insufficient air make-up, and building airtightness can increase negative pressure within the building, which can increase radon levels.

### Q. How common is radon?

A. Radon comes from the natural breakdown (radioactive decay) of uranium. It is usually found in certain soil and rock geologies all around the world and has been found in all 50 U.S. States, Guam, Europe, Asia, and elsewhere.

### Q. Can radon be completely removed from indoor spaces?

A. Radon is a naturally occurring gas that can exist in the air we breathe. Unlike other environmental hazards, radon cannot be permanently removed from our environment. However, with the installation and proper maintenance of a mitigation system, radon levels can be controlled.

### Q. Can you test for radon outside to see if we are exposed to high levels?

A. Radon levels in the outdoors pose little to no risk to human health.

### Q. Should I test my home for radon?

A. Radon has the potential to be elevated in any building or home, whether new or old. Information and resources for testing your home for radon can be found at <https://www.epa.gov/radon>.

## Radon Testing for MCLBA Facilities

### Q. Why is the Navy/Marine Corps testing for radon at MCLB Albany?

A. Testing is a key component of the Navy Radon Assessment and Mitigation Program (NAVRAMP). While there were no known issues with radon at MCLB Albany, the Navy has taken proactive steps to test for radon within its occupied buildings to ensure the health and safety of our service members and employees.

### Q. What is NAVRAMP?

A. The Navy Radon Assessment and Mitigation Program (NAVRAMP) is the Navy's plan to identify, mitigate, and prevent radon exposures in Navy-occupied buildings.

### Q. What buildings were tested?

A. Per NAVRAMP guidance, buildings with occupiable rooms in contact with the soil were designated for testing. Rooms selected for testing were occupied (or have the potential to be occupied) four or more hours a day and had contact with the ground or were directly above a non-occupied ground-contact area (such as a crawlspace or non-occupied basement). Radon above the action level was detected in three buildings (2610, 3500, and 5501).



# Marine Corps Logistics Base Albany Radon Survey and Results - FAQs

The radon levels varied by office space but ranged from 4.0 to 15.4 pCi/L.

## **Q. Why were long-term tests and not short-term radon tests conducted?**

A. The intent of a one-year test is to integrate the day-to-day and seasonal variations in radon concentrations found within most buildings to afford an accurate representation of the annual average.

## **Q. Who was responsible for conducting radon tests at MCLB Albany buildings?**

A. Marine Corps Installations East is responsible for overseeing implementation and compliance with NAVRAMP. MCLB Albany Installation and Environmental Division in coordination with Marine Corps Installations East conducted the radon assessments at MCLB Albany buildings.

## **Q. Where can I find additional information about radon testing at MCLB Albany?**

A. Additional information regarding the radon survey can be requested through email at [MCLBARADON@usmc.mil](mailto:MCLBARADON@usmc.mil)

## **Q. What is the Environmental Protection Agency (EPA) action level for radon?**

A. The EPA has a recommended action level of 4 pCi/L for homes and schools. EPA has no guidance that specifically applies to the workplace. However, the Department of the Navy adheres to its Environmental Readiness Program Manual (OPNAV M5090.1) and the Navy Radon Assessment and Mitigation Program for standards and guidance on radon and has adopted the EPA action level of 4 pCi/L for its buildings. Under the Navy program, mitigation is required within two years in buildings where radon levels range between 4-20 pCi/L.

## **Q. What is the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit for Radon?**

A. For work areas occupied for 40 hours per seven-day work week, OSHA requires employers to take action to mitigate or reduce exposure when the radon levels exceed 100 pCi/L. None of the buildings tested by MCLBA exceeded this OSHA standard.

## **Q. How far above the action level were the measurements in the buildings?**

A. Radon above the action level was detected in three buildings (2610, 3500, and 5501). The radon levels varied by office space but ranged from 4.0 to 15.4 pCi/L.

## Health Concerns

## **Q. Is my health at risk if I work or worked in a building at MCLB Albany?**

A. Long term exposure to elevated levels of radon gas can potentially impact health over time. Although radon readings in three buildings (B3500, 5501 and 2610) were above the NAVRAMP action level for mitigation, the highest readings were less than half of the Occupational Health and Safety Administration (OSHA) exposure limit for the workplace. The command has undertaken immediate mitigation measures to reduce radon levels and expects to implement additional measures later this year. Employees who are concerned about possible impacts are advised to contact their health care providers.

## **Q. How much exposure is too much?**

A. Chronic exposure to elevated levels of radon over long periods of time increases the health risk. EPA recommends mitigation within two years when the radon level is between 4-20 pCi/L. The Navy and Marine Corps have adopted EPA's recommended action level. The Occupational Health and Safety Administration (OSHA) exposure limit is 100 pCi/L for a 40-hour work week in a consecutive seven day period.

## **Q. Should I wear a mask?**

A. Masks are not currently among the recommended mitigation or protective equipment against the effects of radon.



# Marine Corps Logistics Base Albany Radon Survey and Results - FAQs

## **Q. Where can employees go for more information if they have health concerns?**

A. Health concerns can be addressed through the employee's health care provider. Additional general information is available at <https://www.epa.gov/radon> and <https://www.cdc.gov/radon>.

## Mitigation

## **Q. What is the plan to mitigate radon levels that exceed 4 pCi/L?**

A. A mitigation system is currently in design by a qualified mitigation professional and is expected to be completed by September 2023 with installation to follow. This effort will install an active soil depressurization (ASD) system, which is an effective method used for lowering radon levels. This system works by actively drawing air and gas from below the building and venting outside. In addition to the ASD, the installation plans to assess for cracks and other access points which will be sealed to prevent intrusion. A follow-on effort will be undertaken to redesign the heating, ventilation and air conditioning system (HVAC) to include a dedicated outdoor air system (DOAS) which will supply additional outdoor air to further reduce radon levels that may be present.

## EPA Radon Guidelines

## **Q. What is the EPA action level for radon?**

A. The U.S. EPA has a recommended action level of 4 pCi/L. EPA recommends the mitigation of any home or school with radon levels above 4 pCi/L. EPA has no guidance that applies directly to the workplace. The Navy, however, adheres to its Environmental Readiness Program Manual (OPNAV M-5090.1) and the NAVRAMP for standards and guidance on radon and has adopted the EPA action level of 4 pCi/L for its buildings.

## HR Questions/Concerns

## **Q. During the testing period or while the issue is being mitigated, will you offer affected employees alternate work sites or allow them to telework?**

A. There are known issues of sustained elevated radon levels within three MCLB Albany buildings. Consideration for alternate work sites or telework options are among many options being reviewed, if necessary and appropriate.

## **Q. What more can and should be done to minimize exposure?**

A. MCI East contracted a mitigation effort through the US Army Corps of Engineers on 30 September 2022. The effort will provide a full design and specification documents for mitigation technologies and costs. During the week of 28 February to 3 March 2023, the contractor conducted vacuum tests under the building foundations which provides necessary information to develop the design. Final radon mitigation plan is due by September, 2023. However, we encourage employees to test their homes for radon. Information regarding radon testing in your home can be found at the U.S. EPA website <http://epa.gov/radon>.

## **Q. Who may I contact for additional information about the radon test results?**

A. For more information about the radon survey, please send your request to [MCLBALBANYRADON@usmc.mil](mailto:MCLBALBANYRADON@usmc.mil).