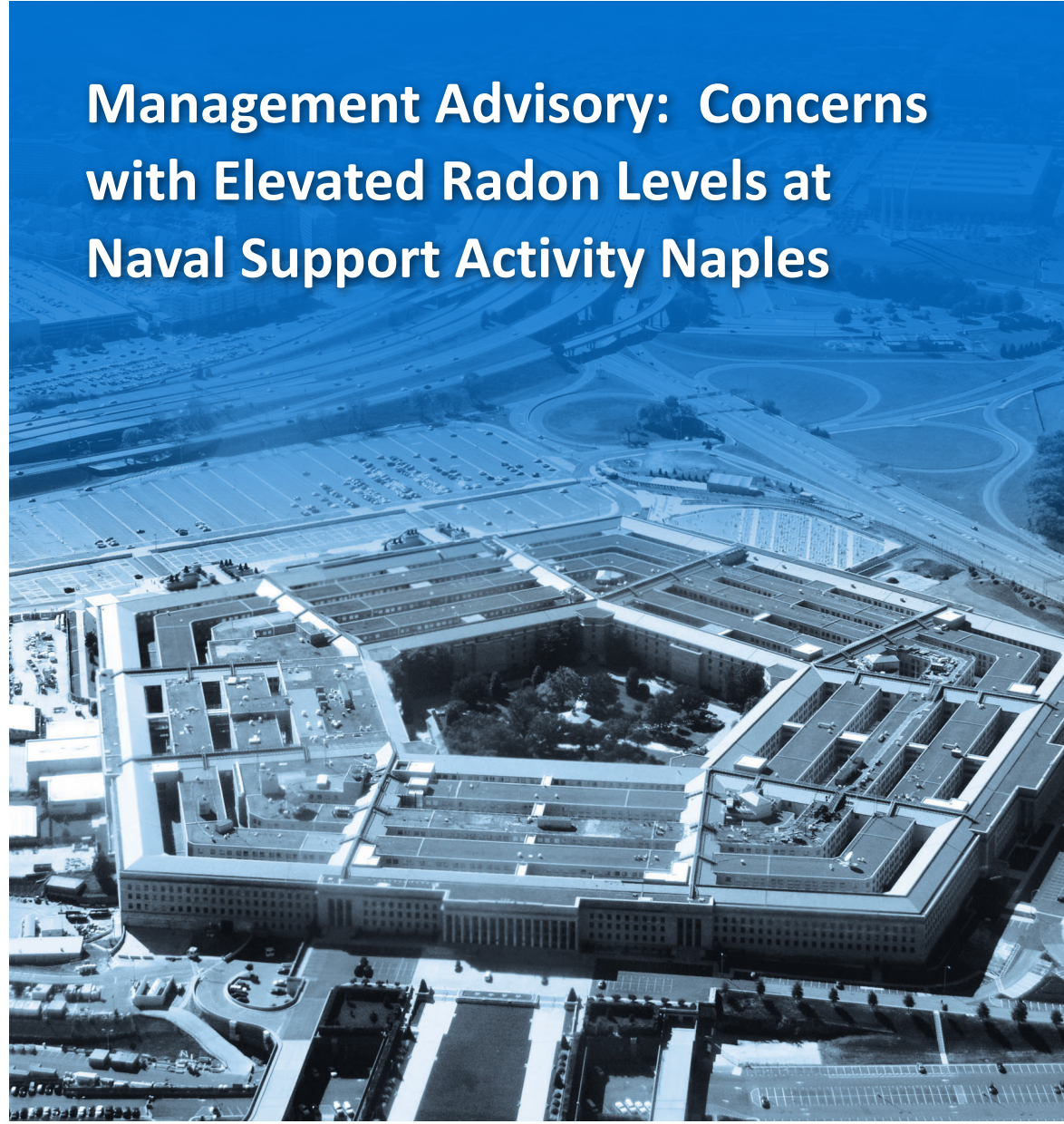




INSPECTOR GENERAL

U.S. Department of Defense

AUGUST 15, 2024



Management Advisory: Concerns with Elevated Radon Levels at Naval Support Activity Naples

INDEPENDENCE ★ INTEGRITY ★ EXCELLENCE ★ TRANSPARENCY





OFFICE OF INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
4800 MARK CENTER DRIVE
ALEXANDRIA, VIRGINIA 22350-1500

August 15, 2024

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND SUSTAINMENT
COMMANDER, NAVY INSTALLATIONS COMMAND
COMMANDER, NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND
AUDITOR GENERAL, DEPARTMENT OF THE NAVY

SUBJECT: Management Advisory: Concerns with Elevated Radon Levels at Naval
Support Activity Naples (Report No. DODIG-2024-121)

This final management advisory provides the results of the DoD Office of Inspector General's review of Naval Support Activity (NSA) Naples management of potentially elevated radon levels within off-base housing. We previously provided copies of the draft management advisory and requested written comments on the recommendations. We considered management's comments on the draft management advisory when preparing the final management advisory. These comments are included in the management advisory.

The purpose of this management advisory is to inform the Deputy Assistant Secretary of Defense for Housing of the lack of DoD policy addressing potentially elevated levels of radon in outside the continental United States off-base housing and to notify Navy officials of the need to better communicate potentially elevated radon levels to personnel living in Naples off-base housing. During the "Audit of the DoD's Management of Air Quality Issues at Camp Lemonnier, Djibouti," (Project No D2023 D000RJ-0155.000), we received a complaint regarding NSA Naples management of potentially elevated radon levels within off-base housing. As a result of the complaint, we initiated specific steps to determine whether Naval Support Activity Naples tested, mitigated, and communicated elevated radon levels in accordance with DoD and Navy regulations. We conducted the work on this management advisory from November 2023 through June 2024 in accordance with generally accepted government auditing standards, except for developing a written audit plan. Specifically, we received a DoD Hotline complaint about concerns with the NSA Radon Management Program. Because of the potential health impacts to Service members and because we were traveling to NSA Naples to conduct fieldwork for the "Audit of the DoD's Management of Air Quality Issues at Camp Lemonnier, Djibouti," we interviewed officials at NSA Naples about the concerns identified in the hotline complaint prior to writing a formal audit plan. This exception did not impact the planning or performance of our work on this advisory, to include our ability to obtain sufficient, appropriate evidence. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our objective.

Radon is a naturally occurring, radioactive, noble gas that is odorless, colorless, and tasteless that can potentially increase the chances of developing lung cancer from long-term exposure. Exposure to elevated indoor radon levels is the second leading cause of lung cancer in the United States and the number one cause of lung cancer among nonsmokers. The Navy

assigned the Naval Facilities Engineering Systems Command the responsibility to identify naval installations worldwide with potentially elevated radon levels. As a result, the Naval Facilities Engineering Systems Command developed the Navy Radon Assessment and Mitigation Program Guidebook, which identifies geographic locations with known elevated radon levels and establishes radon testing, mitigation, and communication requirements. However, the DoD does not have policy that requires the Services to communicate the known potential for elevated radon levels in off-base housing at outside the continental United States installations. Furthermore, the Deputy Assistant Secretary of Defense for Housing has not determined whether the DoD has the authority to provide at-home radon test kits to personnel living in non-Government-owned and Government-controlled off-base housing at installations outside the continental United States. If the DoD does not take steps to improve the communication of known potential elevated radon levels to personnel living in non-Government-owned and Government-controlled off-base housing at installations outside the continental United States, the DoD could be at risk of not providing DoD personnel and their families a safe place to live and work.

Of the 10 total recommendations, this advisory contains 2 recommendations to the Commander, Naval Facilities Engineering Systems Command, that we considered unresolved because the Naval Facilities Engineering Systems Command Inspector General, responding on behalf of the Commander, did not fully address either recommendation. The two recommendations will remain unresolved until management has agreed to take actions that we determine to be sufficient to meet the intent of the recommendations. The remaining eight recommendations will remain open until management officials submit adequate documentation showing that all agreed-upon actions are complete.

DoD Instruction 7650.03 requires that recommendations be resolved promptly. For unresolved recommendations, within 30 days please provide us your response concerning specific actions in process or alternative corrective actions proposed on the recommendations. Send your response to either audrgo@dodig.mil if unclassified or rfunet@dodig.smil.mil if classified SECRET. For the resolved recommendations, please provide us documentation showing you have completed the agreed-upon actions. Please send your documentation for the resolved recommendations as a PDF to followup@dodig.mil. Please see the Recommendations Table for the status of recommendations.

We appreciate the cooperation and assistance received during development of this management advisory. If you have any questions, please contact me [REDACTED].

FOR THE INSPECTOR GENERAL:



Richard B. Vasquez
Assistant Inspector General for Audit
Readiness and Global Operations

Recommendations Table

| Management | Recommendations Unresolved | Recommendations Resolved | Recommendations Closed |
|---|----------------------------|--------------------------|------------------------|
| Deputy Assistant Secretary of Defense for Housing | | 3.a, 3.b, 3.c | |
| Commander, Navy Region Europe, Africa, Central | | 4 | |
| Commander, Naval Support Activity Naples | | 1.a, 1.b, 1.c, 1.d | |
| Commander, Naval Facilities Engineering Systems Command | 2.a, 2.b | | |

Please provide Management Comments by September 16, 2024.

Note: The following categories are used to describe agency management’s comments to individual recommendations.

- **Unresolved** – Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- **Resolved** – Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- **Closed** – The DoD OIG verified that the agreed upon corrective actions were implemented.



Concerns with Elevated Radon Levels at NSA Naples

After announcing the “Audit of the DoD’s Management of Air Quality Issues at Camp Lemonnier, Djibouti,” we received a DoD Hotline complaint regarding Naval Support Activity (NSA) Naples management of potentially elevated radon levels within off-base housing.¹ The complainant alleged that NSA Naples leadership did not take the necessary actions to inform DoD personnel living off-base at NSA Naples of their potential exposure to elevated radon levels. As a result of this complaint, we initiated this review to determine whether NSA Naples tested, mitigated, and communicated elevated radon levels in accordance with DoD and Navy regulations.

We found that NSA Naples personnel complied with Navy radon testing and mitigation requirements for all 293 testable Government-owned and Government-controlled (GO-GC) military family housing units. However, NSA Naples Environmental Division personnel did not test for elevated radon levels at GO-GC military housing for unaccompanied DoD personnel (GO-GC unaccompanied housing) and GO-GC nonresidential facilities in accordance with Navy policy. GO-GC unaccompanied housing and nonresidential facilities were not tested because NSA Naples personnel incorrectly interpreted the Navy Radon Assessment and Mitigation Program Guidebook (NAVRAMP) requirements for splitting an installation into smaller sites.²

Furthermore, the NSA Naples Commander and officials from the NSA Naples Housing and Public Affairs Offices did not inform the 3,997 DoD personnel and dependents living in non-GO-GC off-base housing of the known potential for elevated radon levels at NSA Naples or of DoD personnel’s ability to test for radon in non-GO-GC off-base housing.³ NSA Naples did not effectively communicate to DoD personnel living in non-GO-GC off-base housing because the Deputy Assistant Secretary of Defense (DASD) for Housing had not established policies for communicating the known potential for elevated radon levels to DoD personnel living in non-GO-GC off-base housing at installations outside the continental United States (OCONUS). Finally, the DASD for Housing has not determined whether the DoD has the authority to provide at-home radon test kits to OCONUS DoD personnel living in non-GO-GC off-base housing.

Without adequate radon testing, mitigation of radon in Navy operated facilities, and effective communication to DoD personnel living in non-GO-GC off-base housing, the DoD and the Navy could impact the timely discovery of possible radon-related issues and, thereby, create a potential risk to the health and safety of DoD personnel and their families stationed at NSA Naples.

¹ Project No. D2023-D000RJ-0155.000, “Audit of the DoD’s Management of Air Quality Issues at Camp Lemonnier, Djibouti,” announced September 25, 2023.

² Naval Facilities Engineering Systems Command, “NAVRAMP Guidebook for Naval Shore Installations,” May 9, 2023.

³ As of November 17, 2023, NSA Naples reported 3,997 DoD personnel and dependents living in non-GO-GC off-base housing.

The NSA Naples Housing Office approved lease for DoD personnel living in non-GO-GC housing authorizes the tenant to test the home for radon.

Background

Radon is a naturally occurring, radioactive, noble gas that is odorless, colorless, and tasteless. According to the Agency for Toxic Substances and Disease Registry, many scientists believe that long-term exposure to elevated levels of radon in the air increases the chances of developing lung cancer.⁴ Exposure to elevated indoor radon levels is the second leading cause of lung cancer in the United States and the number one cause of lung cancer among nonsmokers. The Indoor Radon Abatement Act of 1988 establishes a long-term goal that indoor air be as free from radon as the air outside of buildings.⁵ According to the U.S. Environmental Protection Agency (EPA), indoor radon levels in excess of 4.0 picocuries per liter of air (pCi/L) are hazardous; however, any amount of radon can pose a risk.⁶ The EPA estimates that radon causes over 21,000 deaths per year from lung cancer.

NSA Naples

NSA Naples, located in Naples, Italy, is home to over 55 tenant commands, including Navy Region Europe, Africa, Central (NAVEURAFCENT). As of November 17, 2023, NSA Naples personnel reported that there were 6,674 DoD personnel and dependents stationed at NSA Naples. Of the 6,674, NSA Naples reported that 3,997 individuals, or almost 60 percent of this population, lived in non-GO-GC off-base housing. Since 2016, the Navy has categorized NSA Naples as a radon potential category (RPC) 1 installation, the Navy's highest radon potential category.⁷

DoD personnel at NSA Naples reside in GO-GC military family housing, GO-GC unaccompanied housing, and non-GO-GC off-base housing. Specifically, the:

- GO-GC military family housing located on, and off-base and GO-GC unaccompanied housing located on base are DoD owned or DoD leased housing facilities that are managed and maintained by the DoD; and
- non-GO-GC off-base housing facilities consist of off-base community rental properties for which DoD personnel sign private lease agreements with local rental property owners.

In addition, NSA Naples has over 84 GO-GC nonresidential facilities, on and off-base, that consist of office space, medical facilities, childcare facilities, and other buildings not used as the primary residence of DoD personnel.

⁴ Agency for Toxic Substances and Disease Registry, "Radon – ToxFAQs: CAS # 10043-92-2 and 14859-67-7," October 2012. The Agency for Toxic Substances and Disease Registry is a public health agency of the U.S. Department of Health and Human Services. It was established to serve as a science-based health agency working to address community concerns about hazardous waste.

⁵ U.S. Public Law 100-551, "Title III – Indoor Radon Abatement," October 28, 1988.

⁶ U.S. Environmental Protection Agency, "A Citizen's Guide to Radon," 2016. The EPA protects people and the environment from significant health risks; sponsors and conducts research; and develops and enforces environmental regulations.

⁷ According to the NAVRAMPGuidebook, RPC 1 indicates elevated radon potential exists; RPC 2 indicates radon potential is unknown; and RPC 3 indicates low radon potential.

Roles and Responsibilities

Assistant Secretary of Defense for Energy, Installations, and Environment

The Assistant Secretary of Defense for Energy, Installations, and Environment is required to provide DoD guidance and general procedures relating to community housing; housing-related relocation and referral services; and DoD housing. Within this organization, the DASD for Housing is responsible for all matters relating to DoD housing, to include developing and monitoring the implementation of DoD housing guidance and procedures to support readiness and protect the housing aspect of quality of life for DoD personnel and their families. Furthermore, the DASD for Housing must ensure DoD personnel have access to safe; high-quality; and affordable housing delivered through cost-effective military construction, government leasing, and privatization.

Naval Facilities Engineering Systems Command

Naval Facilities Engineering Systems Command (NAVFAC) is responsible for the acquisition, construction, operations and maintenance, and disposal of the Navy's shore infrastructure. In response to the Indoor Radon Abatement Act of 1988, the Navy assigned NAVFAC the responsibility to identify naval installations worldwide with potentially elevated radon levels. As a result, NAVFAC developed the NAVRAMP with the goal to identify potential hazards to Navy personnel from exposure to naturally occurring radon gas and prioritize corrective actions. As the technical experts on testing and mitigating elevated radon levels, NAVFAC assists Navy installations with the design of radon mitigation systems.⁸

Navy Region Europe, Africa, Central

NAVEURAFCENT's mission is to provide efficient and effective shore service support to the United States and Allied forces operating in Europe, Africa, and Central Asia. As part of this mission, NAVEURAFCENT oversees nine installations, including NSA Naples.

NSA Naples

Radon testing at NSA Naples involves coordination between the NSA Naples Housing Office, Public Works Environmental Division (Environmental Division), and Public Affairs Office. While each office has a different role, all share a responsibility to ensure that DoD personnel and their families stationed at NSA Naples have a safe place to live and work.

⁸ Mitigation systems are any system or steps designed to reduce radon concentrations in the air inside of a building.

Housing Office

The NSA Naples Housing Office is responsible for planning, funding, and executing radon testing and mitigating elevated radon levels in GO-GC military family housing at NSA Naples. In addition, the NSA Naples Housing Office provides assistance to all DoD personnel stationed at NSA Naples, including personnel residing in non-GO-GC off-base housing. Regardless of the type of housing, the NSA Naples Housing Office assists DoD personnel with reviews of lease agreements, safety and security inspections of the residences, and distribution of home appliances.⁹

Environmental Division

The NSA Naples Environmental Division is responsible for the planning, funding, and executing of radon testing and radon mitigation in GO-GC unaccompanied housing and nonresidential facilities. In addition to its responsibilities for GO-GC unaccompanied housing and nonresidential facilities, the NSA Naples Environmental Division collaborates with the NSA Naples Housing Office to track GO-GC family housing units with known elevated radon levels and ensures that radon mitigation is completed. The Environmental Division is also responsible for developing and updating the NSA Naples radon management plan.

Public Affairs Office

The NSA Naples Public Affairs Office is required to notify DoD personnel stationed at NSA Naples when there is a change in policy or issues occur that could potentially impact the general population. The Public Affairs Office is responsible for developing awareness campaigns to keep DoD personnel stationed at NSA Naples informed on potential exposure to environmental and household hazards, such as radon. The Public Affairs Office, in coordination with the Housing Office and Environmental Division, is required to notify GO-GC housing residents whose homes are to be tested for radon and notify residents of GO-GC facilities when elevated radon levels are detected.

Radon Testing and Mitigation Requirements

The NAVRAMP requires all installations, regardless of radon potential, to develop and maintain a radon management plan. The radon management plan establishes radon control procedures, including testing and mitigation systems within all Navy installations. The NAVRAMP requires that installation radon management plans include a radon risk communication plan, which describes measures that will be used at installations to keep all stakeholders fully informed of the findings and significance of any past or present radon projects.

The NAVRAMP requires that all installations test all GO-GC military family housing for radon every 5 years. The NAVRAMP also requires installations to test all GO-GC nonresidential facilities for radon every 5 years when elevated radon potential exists within the installation.

⁹ Appliances provided by the Housing Office to DoD personnel include, among other items, a stove, oven, refrigerator, microwave, convection oven, washer, and dryer.

The NAVRAMP states that radon levels in GO-GC facilities under 4.0 pCi/L do not require mitigation. When radon levels are at or exceed 4.0 pCi/L in GO-GC facilities, the NAVRAMP states that Navy personnel must take corrective action to reduce radon levels in all GO-GC facilities when radon levels are:

- between 4.0 and 20.0 pCi/L within 2 years;
- between 20.01 and 200.00 pCi/L within 6 months; or
- over 200.01 pCi/L within 3 weeks.

NSA Naples Housing personnel stated that DoD personnel leasing non-GO-GC off-base housing have the ability to test their leased rental property and work with their landlords to mitigate elevated radon levels. NSA Naples non-GO-GC off-base housing leases state that, at any given time, the landlord authorizes the renter to test the quality of the water supplied to the unit, as well as the surrounding soil and air, which includes testing for radon.

NSA Naples Tested Radon Levels for GO-GC Military Family Housing

NSA Naples personnel complied with NAVRAMP requirements to test GO-GC military family housing units, but they did not meet the requirement to conduct testing every 5 years. In May 2023, 7 years after the previous radon testing, NSA Naples reported completing radon testing for all 293 testable NSA Naples GO-GC military family housing units, which comprised 291 GO-GC military family housing units on NSA Naples and 2 GO-GC military family housing units in the surrounding region of Naples, Italy.¹⁰ NSA Naples Environmental Division personnel stated that NSA Naples was 2 years past the NAVRAMP radon testing requirement due to Italian laws strictly prohibiting NSA Naples personnel from entering individual family housing facilities to place radon test kits during the COVID-19 pandemic.

During the 2023 NSA Naples radon testing of GO-GC military family housing, NSA Naples reported that 281 GO-GC military family housing units on NSA Naples had radon levels below the NAVRAMP threshold of 4.0 pCi/L and that radon detectors placed in 8 units were not present when NSA Naples Environmental Division personnel attempted to retrieve the test kits. NSA Naples reported that radon concentrations in four GO-GC military family housing units, of which two were located on NSA Naples and two off-base within the region of Naples, Italy, had radon levels that were at or exceeded the 4.0 pCi/L threshold.

¹⁰ NSA Naples Public Works Environmental Division, "5-Year Radon Retesting Results for NSA Naples Family Housing," July 2023.

Table 1 shows the results of the four GO-GC military family housing units with elevated radon levels.

Table 1. May 2023 NSA Naples GO-GC Military Family Housing Units with Elevated Radon Levels

| GO-GC Military Family Housing Unit Number | Location of Housing Unit | Radon Results (pCi/L) |
|---|--------------------------|-----------------------|
| 2150-2 | NSA Naples | 4.4 |
| 2302 | NSA Naples | 4.0 |
| 823 | Off-base Naples, Italy | 13.0 |
| 824 | Off-base Naples, Italy | 10.6 |

Source: The DoD OIG.

The NAVRAMP requires NSA Naples personnel to mitigate the radon levels at the four GO-GC military family housing units at or exceeding the 4.0 pCi/L within 2 years of originally identifying the elevated radon level. NSA Naples Housing Office personnel stated that as of October 3, 2023, units 2150-2 and 2302 had radon mitigation systems installed and as of March 7, 2024, contracted personnel installed radon mitigation systems in units 823 and 824. NSA Naples personnel further stated that they installed test kits in the two off-base GO-GC military family housing units on March 14, 2024, and at the two on-base GO-GC military family housing units on March 15, 2024, and that the test results would be available by April 2025.¹¹

NSA Naples Did Not Comply with Radon Testing for GO-GC Unaccompanied Housing or Nonresidential Facilities

NSA Naples personnel did not comply with NAVRAMP requirements for testing GO-GC unaccompanied housing and GO-GC nonresidential facilities every 5 years, or the NAVRAMP timelines for mitigating radon levels that are at or exceed the 4.0 pCi/L threshold. The September 30, 2017, version of the NAVRAMP states that RPC 1 installations must retest GO-GC military family housing, unaccompanied housing, and nonresidential buildings after significant earthquakes, severe weather events, or once every 5 years. As of March 2024, NSA Naples personnel had not tested GO-GC unaccompanied housing and nonresidential facilities since 2016, a period of more than 7 years. On April 4, 2024, NSA Naples personnel stated that, according to their interpretation of the 2017 NAVRAMP, they did not test GO-GC unaccompanied housing and nonresidential facilities during the 2023 radon testing because NSA Naples Environmental Staff categorized unaccompanied housing and nonresidential facilities as smaller RPC 3 sites.

However, NSA Naples personnel incorrectly interpreted NAVRAMP requirements for splitting an installation into smaller sites. Both the 2017 and 2023 NAVRAMP state that installation personnel may split a single installation into smaller sites for radon testing and radon program

¹¹ The NAVRAMP states that long-term radon measurement (testing for 1 year) is intended to integrate the day-to-day and seasonal variations in radon concentrations found within most buildings to afford a good representation of the average annual risk of radon exposure. Therefore, once installed, the radon test kits are left in place over an extended period of time to collect data before being removed by the contractor or government personnel to analyze the data collected and provide results to the Installation.

management. The NAVRAMP establishes criteria for splitting an installation into smaller sites, which includes allowing an installation to be split into smaller sites when a single building or collection of buildings, such as a GO-GC military family housing or GO-GC unaccompanied housing are not within the traditional footprint of the installation. The 2023 NAVRAMP states that splitting an installation into smaller sites cannot be used to circumvent future or current radon testing requirements and that a group of buildings where no elevated radon was found cannot be grouped into an RPC 3 site if one or more buildings at the same site had elevated radon levels. NSA Naples officials misinterpreted the NAVRAMP requirement and inadvertently circumvented the NAVRAMP by splitting the installation into 13 smaller sites using the following categories: buildings with radon testing results above 4.0 pCi/L, buildings with radon testing results below 4.0 pCi/L, and buildings that did not have radon testing results. For example, NSA Naples Environmental personnel split the NSA Naples Support Site, which includes all GO-GC unaccompanied housing and 291 of the 293 testable GO-GC military family housing units, into three sub-sites and assigned each of the 3 smaller sites a different RPC level. Specifically, within the NSA Naples Support Site, NSA Naples personnel assigned:

- five buildings as RPC 1,
- three buildings as RPC 2, and
- all other buildings, including all GO-GC unaccompanied housing and 290 military family housing units, as RPC 3.

However, as previously stated, the overall NSA Naples installation was rated RPC 1. Splitting an installation into smaller sites and establishing multiple RPC levels within that same site when one or more buildings has known elevated radon levels is a clear violation of the requirements outlined in both the 2017 and 2023 NAVRAMP. Consequently, although unintentional, NSA Naples officials' justification for not testing GO-GC unaccompanied housing and nonresidential buildings is based on an inaccurate interpretation of the NAVRAMP. Therefore, the Commander of NSA Naples should update the NSA Naples Radon Management Plan to accurately categorize radon potential categories at NSA Naples in accordance with the NAVRAMP.

Furthermore, during the 2016 radon testing, NSA Naples identified 24 rooms within 12 GO-GC nonresidential facilities with radon levels ranging from 4.1 pCi/L to 35.6 pCi/L. Despite installing mitigation systems in all 24 rooms and multiple efforts to mitigate radon levels in GO-GC nonresidential facilities, NSA Naples officials did not reduce the elevated radon to acceptable levels within the 2-year NAVRAMP requirement in 7 of the 12 GO-GC nonresidential facilities. A June 2023 NSA Naples Environmental Division report stated that despite installing radon mitigation systems in all 24 rooms and retesting the radon levels, 10 of 24 mitigated rooms (located in 7 of 12 GO-GC nonresidential facilities) continued to have radon levels at or exceeding the 4.0 pCi/L threshold. On November 8, 2023, the NSA Naples Environmental Division Director confirmed that the 10 rooms required modifications to the radon mitigation systems. On March 1, 2024, NSA Naples personnel confirmed that changes have not been

made to the radon mitigation systems in the 10 rooms with elevated radon levels. NSA Naples personnel stated that they plan to modify the systems and have the rooms retested as early as May 2024. See Table 2 for the results of the 10 rooms in the GO-GC nonresidential facilities with elevated radon levels 2016.

Table 2. Ten Rooms in GO-GC Nonresidential Facilities with Elevated Radon Levels

| Building Number | Room Description | 2016 Radon Test Results (pCi/L) | 2023 Radon Test Results (pCi/L) |
|-----------------|--------------------------|---------------------------------|---------------------------------|
| 752A | Laundromat | 5.6 | 4.0 |
| 707 | Childcare | 7.9 | 4.1 |
| 707 | Dining | 7 | 4.6 |
| 103 | Office | 6.3 | 4.4 |
| 103 | Depot Office | 5.6 | 9.2 |
| 2074 | Room Services Help | 6.6 | 4.1 |
| 2078 | Warehouse - Room 2 | 7.3 | 6.3 |
| 2078 | Warehouse - Room 3 | 18.7 | 5.9 |
| 468 | Pass and ID at East Gate | 29 | 18.1 |
| 489 | West Sentry Post | 4.8 | 8.0 |

Source: The DoD OIG.

In July 2023, NSA Naples Environmental Division personnel reported that GO-GC unaccompanied housing was previously tested in 2016 and that none of the facilities reported elevated radon levels. On September 15, 2023, NAVFAC Atlantic awarded a contract—at a cost of \$588,359—to have all GO-GC unaccompanied housing and GO-GC nonresidential facilities at NSA Naples tested for elevated radon levels to comply with NAVRAMP requirements. NSA Naples personnel stated that unaccompanied housing and nonresidential contracted testing services are tentatively scheduled to begin in late August 2024. Therefore, the Commander, NSA Naples should monitor the contractor’s execution of the contracted radon testing services for all GO-GC unaccompanied housing and GO-GC nonresidential facilities, including the 10 rooms with continued elevated radon, to ensure that adjustments to the radon mitigation systems resolve the elevated radon levels and the required testing is performed.

NSA Naples Did Not Effectively Communicate Elevated Radon Levels to DoD Personnel Living in Off-Base Housing

The NSA Naples Commander, Housing Office, and Public Affairs Office did not effectively communicate with DoD personnel living in non-GO-GC off-base housing regarding the installation's RPC or ensure that DoD personnel were aware of their ability to test their off-base homes for radon, as outlined in their NSA Naples Housing leases. In the September 2016 NAVRAMP, the Navy categorized NSA Naples as an RPC 1 installation with a known potential for elevated radon levels.¹² Despite the NSA Naples Commander, Housing Office, and Public Affairs Office communicating the general health risks of radon, they did not directly inform DoD personnel living in non-GO-GC off-base housing of the installation's RPC.

Communicating Radon Potential Categories

The NSA Naples Commander, Housing Office, and Public Affairs Office personnel did not directly inform DoD personnel living in non-GO-GC off-base housing that NSA Naples was an RPC 1 installation with a known potential for elevated radon levels. The NAVRAMP states that the installation's radon risk communication plan will describe measures that the installation will use to keep all stakeholders, including personnel living in non-GO-GC off-base housing, fully informed of the findings and significance of any past or present radon projects. The NSA Naples radon risk communication plan identifies personnel living in non-GO-GC off-base housing as a stakeholder to the plan. Therefore, the findings and significance of past radon testing should be communicated to DoD personnel living in non-GO-GC off-base housing.

Efforts by the NSA Naples Commander, Housing Office, and Public Affairs Office personnel to communicate the risks of radon fell short of providing DoD personnel stationed at NSA Naples with information from past radon testing and the Navy's designation of NSA Naples as an RPC 1 installation. From September 1, 2023, through January 24, 2024, NSA Naples officials took the following actions to communicate the general risks of radon and the results of the 2023 NSA Naples radon testing of GO-GC military family housing.

- Uploaded six posts to their official NSA Naples social media page.
- Made daily radio commercial announcements on the American Forces Network.
- Held a town hall in which the 2023 NSA Naples GO-GC military family housing radon testing results were discussed.
- Updated the NSA Naples Welcome Guide to include information regarding the risks of radon.
- Issued an NSA Naples Housing Newsletter mentioning the 2023 GO-GC military family housing radon testing.

¹² Naval Facilities Engineering Systems Command, "NAVRAMP Guidebook for Naval Shore Installations," September 21, 2016.

- Issued two letters from the NSA Commander discussing the results of the 2023 GO-GC military family housing radon testing and informing DoD personnel living in non-GO-GC off-base housing to contact the NSA Naples Housing office if they have concerns.

The September 18, 2023 and January 2, 2024 letters issued by the NSA Naples Commander and NSA Naples Town Hall addressed the results of the 2023 radon testing of GO-GC military family housing; however, the letters did not directly communicate that NSA Naples was an RPC 1 installation with a known potential for elevated levels. During the voluntary NSA Naples Town Hall, the NSA Naples Commander discussed the results of the 2023 radon testing, informed attendees that the results of the testing were available on the NSA Naples website, and explained how to contact the NSA Naples Housing Office with any questions. However, neither the town hall nor the Commander’s letters notified DoD personnel that NSA Naples was an RPC 1 installation with a known potential for elevated radon.

Moreover, the other forms of communication by NSA Naples Housing Office did not fully address the known potential for elevated radon. For example, the NSA Naples social media posts provided general awareness information on the risks of radon but did not inform individuals of the known potential for elevated radon at NSA Naples. See the Figure for a September 1, 2023 post on radon from the NSA Naples official social media page.

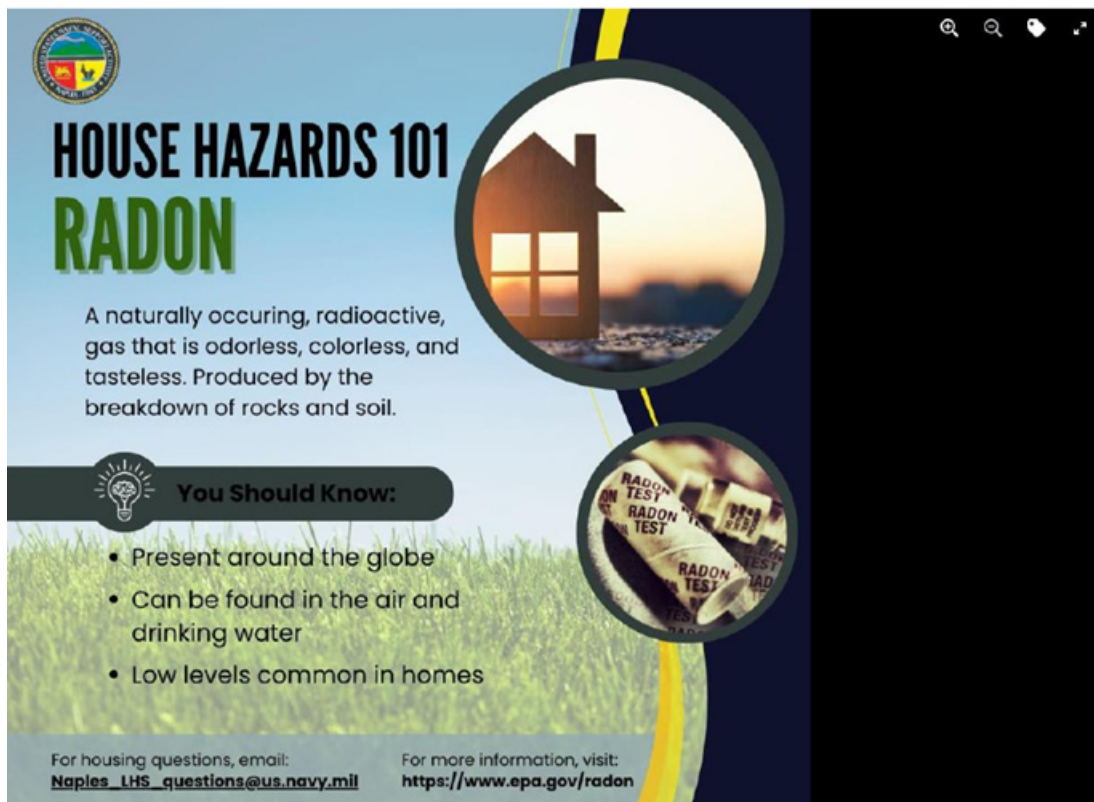


Figure. September 1, 2023 NSA Naples Social Media Post on Radon Awareness
Source: NSA Naples Housing Office.

The NAVRAMP requires installations to develop a communication plan with the objective of establishing open and transparent communication and keeping stakeholders fully informed of the findings and significance of any past or present radon projects. In January 2024, the NSA Naples Public Affairs Office established the NSA Naples Radon Awareness Shore Enterprise Strategic Communication Plan, which NSA Naples officials stated would supersede the current radon risk communication plan. The NSA Naples Radon Awareness Shore Enterprise Strategic Communication Plan contains key messages and an annual timeline that Public Affairs Office personnel can use when communicating the risks of radon to DoD personnel. However, the plan does not discuss the NSA Naples RPC level or have guidance for Public Affairs Office personnel to communicate RPC levels to DoD personnel stationed at NSA Naples. Therefore, the Commander, NSA Naples should update the NSA Naples Radon Awareness Shore Enterprise Strategic Communication Plan to inform DoD personnel that NSA Naples is an RPC 1 installation with a known potential for elevated radon levels.

Furthermore, on multiple occasions the NAVRAMP and NSA Naples Officials pointed DoD personnel to the EPA for information on the risks of radon. While the EPA provides information on the risks of radon in the United States, the EPA does not have jurisdiction over OCONUS locations and does not publish a radon zone map that covers the potential radon levels for OCONUS locations. Although the EPA has not developed information regarding OCONUS locations, the September 2016 NAVRAMP established an RPC level for each Navy installation, including OCONUS locations. Therefore, the Commander, NAVFAC should update the NAVRAMP to require that installation radon communication plans adequately address the known RPC levels at each OCONUS installation and that those RPC levels are communicated to DoD personnel assigned to the installation, including individuals living in non-GO-GC off-base housing.

Communicating the Ability to Test for Radon

The NSA Naples Housing Office and Public Affairs Office did not ensure that DoD personnel living in non-GO-GC off-base housing were aware of their ability to test their off-base homes for radon. The standard NSA Naples Housing lease states that the landlord authorizes the tenant to test the quality of the water supplied to the non-GO-GC off-base housing unit, as well as the surrounding soil and air, which includes testing for radon. However, we asked the NAVEURAFCENT Director for Housing, as well as 8 other NAVEURAFCENT and NSA Naples personnel from the Housing, Environmental Division, and Public Affairs offices, if they were aware that their leases afforded them the ability to test their homes for radon. Out of the 9 individuals we asked, all 9 stated they were unaware of their ability to test their homes for radon. The NSA Naples personnel from the Housing, Environmental Division, and Public Affairs offices were made aware around June 2023 when they were included in meetings regarding the 2023 NSA Naples radon testing of GO-GC military family housing units. If personnel from the NSA Naples Housing, Environmental Division, and Public Affairs offices responsible for testing, mitigating, and communicating the results of elevated radon levels

are unaware of their ability to test their non-GO-GC off-base houses for radon, it is likely that other DoD personnel—with no connection to the roles and responsibilities of these offices—renting non-GO-GC off-base housing would also not know about the clause in the lease that allows them to have the property tested for radon and their ability to work with the lessor to address any identified issues. Furthermore, because Housing, Environmental Division, and Public Affairs office personnel were unaware of their ability to test their homes for radon, if renters would have contacted these offices, they may have been unable to get more complete information regarding radon testing at non-GO-GC off-base housing.

Neither the DoD Manual 4165.63 nor the NAVRAMP require the NSA Naples Commander to ensure that individuals are made aware of the information in their non-GO-GC off-base housing leases.¹³ However, NSA Naples is a RPC 1 installation that has identified elevated radon levels in 100 percent of GO-GC military housing facilities that are off-base and officials with the responsibility for testing, mitigating, and communicating the results of radon testing were unaware of the language in their leases. Therefore, the Commander, NSA Naples should ensure that communications inform DoD personnel stationed at NSA Naples and living in non-GO-GC off-base housing of their ability to test their homes for radon and work with the lessor to address any identified issues, as outlined in the NSA Naples Housing lease.

The DoD Lacked Policy for Managing Radon Risks for OCONUS Off-Base Housing

The DoD lacked adequate policies on radon at OCONUS non-GO-GC off-base housing. While the DoD has policies to protect DoD personnel from other household hazards in off-base housing, there is no policy regarding communicating the known potential for elevated radon levels at OCONUS installations. Furthermore, the DASD for Housing has not determined whether they have the legal authority to provide at-home radon test kits to DoD personnel living in non-GO-GC off-base housing at OCONUS locations.

The DoD Lacked Policy on Communicating Known Potential for Elevated Radon Levels at OCONUS Locations

The DoD does not have policy that requires the Services to communicate the known potential for elevated radon levels in non-GO-GC off-base housing at OCONUS installations. In November 2023, the DASD for Housing acknowledged that there are gaps in the DoD policy for communicating known potential for elevated radon levels to DoD personnel in non-GO-GC off-base housing at OCONUS installations. The DASD for Housing did not expand on which policy gaps they identified but stated that they are updating all DoD housing policies and will look for opportunities within the statutorily required policies to address off-base housing issues, including awareness of environmental, health, and safety hazards.

¹³ DoD Manual 4165.63, “DoD Housing Management,” August 31, 2018.

While the DASD for Housing stated they would look for opportunities within the statutorily required policies to address off-base housing issues, there are policies in place that require the military Services to provide assistance to DoD personnel living in non-GO-GC off-base housing OCONUS. Section 1056, title 10, United States Code, requires the Secretary of Defense to establish a relocation assistance program that includes worldwide home relocation assistance services, with an emphasis on services to assist DoD personnel in locating adequate, affordable temporary and permanent housing.¹⁴ DoD Manual 4165.63 implements this requirement by directing the military services to perform inspections of non-GO-GC off-base housing for suitability based on environmental, health, and safety considerations. However, we reviewed DoD Manual 4165.63 and found that it did not include any guidance for the Services to communicate potential exposure for increased environmental hazards, such as radon. Therefore, as part of the process to update DoD housing policies, the DASD for Housing should develop and implement policy to ensure DoD personnel living in non-GO-GC off-base housing are made aware of known elevated radon levels at OCONUS installations.

The DoD's Authority to Provide At-Home Radon Test Kits

The DASD for Housing has not sought or obtained guidance on their authority to provide at-home radon test kits to DoD personnel living in non-GO-GC off-base housing at OCONUS locations. DoD Manual 4165.63 states that housing support services should include inspections of units for suitability based on environmental, health, and safety considerations. Navy Housing Offices at OCONUS Installations provide inspection services, to include inspecting non-GO-GC off-base housing at OCONUS locations for environmental hazards, such as lead based paint and mold, but the inspections did not require the housing office to determine if the off-base home had elevated radon levels or provide at-home radon test kits to DoD personnel. Therefore, as the commander responsible for overseeing NSA Naples, the NAVEURAFCENT Commander should conduct a review of the NSA Naples Housing Office inspection services to determine if the housing inspection program can perform radon testing under the authorities already being executed, and implement the results accordingly.

The DASD for Housing stated that there is no DoD policy that requires the Services to test OCONUS non-GO-GC off-base housing for elevated radon levels or provide at-home radon test kits to OCONUS DoD personnel. While the DASD for Housing stated there is no policy requiring the Services provide at-home radon test kits, there are policies used by the Services to protect individuals living in non-GO-GC off-base housing from environmental hazards. For example, DoD Manual 4165.63 establishes the loaner furniture program in which OCONUS Installation Commanders, unless constrained by law or Federal regulations, must purchase furnishings, equipment, supplies, and services that best satisfy their installation's housing requirements. This requirement applies to both GO-GC housing and non-GO-GC off-base housing. The NSA Naples Commander executed this requirement by developing a loaner

¹⁴ Section 1056, title 10, United States Code, "Relocation Assistance Programs."

furnishing program in which the NSA Naples Housing Office supplies DoD personnel living in non-GO-GC off-base housing with home appliances, such as refrigerators and washing machines, and equipment to detect and prevent environmental hazards, such as carbon monoxide detectors and de-humidifiers. However, on November 8, 2023, the NAVEURAFCENT Director for Housing stated that there has been no discussion of providing at-home radon test kits to DoD personnel living in non-GO-GC off-base housing.

In November 2023, the DASD for Housing stated that they were unsure of what statutory authority would allow them to provide at-home radon test kits to DoD personnel living in non-GO-GC off-base housing OCONUS. Therefore, the DASD for Housing should conduct a review to determine whether the DoD has the authority to provide at-home radon test kits to DoD personnel living in non-GO-GC off-base housing OCONUS. If the DoD has the authority to provide at-home radon test kits, then the DASD for Housing should issue guidance to the Services on providing at-home radon test kits to DoD personnel living in non-GO-GC off-base housing at OCONUS installations.

Conclusion

The 2022 National Security Strategy states that the DoD is committed to the wellbeing of Service members and their families while in service and beyond.¹⁵ Service members and their families spend a significant amount of their time living and working on defense installations. The NAVRAMP acknowledges that exposure to elevated indoor radon levels is the second leading cause of lung cancer in the United States and the number one cause of lung cancer among nonsmokers. Without adequate radon testing, radon mitigation of Navy operated facilities, and effective communication to DoD personnel living in non-GO-GC off-base housing, the DoD and Navy could impact the timely discovery of possible radon-related issues and, thereby, create a potential risk to the health and safety of DoD personnel and their families at OCONUS installations.

However, the DoD does not have policy that requires the Services to communicate the known potential for elevated radon levels to all DoD personnel at OCONUS installations, including individuals living in non-GO-GC off-base housing. Furthermore, the DASD for Housing has not determined whether the DoD has the authority to provide at-home radon test kits to personnel living in non-GO-GC off-base housing at OCONUS installations. If the DoD does not take steps to improve the communication of the known elevated radon levels to personnel living at OCONUS installations, then the DoD increases its risk of not providing DoD personnel and their families a safe place to live and work.

¹⁵ "National Security Strategy," October 2022.

Recommendations, Management Comments, Management Actions Taken, and Our Response

Recommendation 1

We recommend that the Commander of Naval Support Activity Naples:

- a. **Update the Naval Support Activity Naples Radon Management Plan to accurately categorize radon potential categories at Naval Support Activity Naples in accordance with the Navy Radon Assessment and Mitigation Program Guidebook.**

Commander, Navy Region Europe, Africa, Central Comments

The Commander, NAVEURAFCENT, responding for the Commander of NSA Naples, agreed with the recommendation and stated that they will update the NSA Naples Radon Management Plan and clarify the meaning of RPC 1 to indicate that it is not related to the EPA RPC. The update will clarify that the RPC is the level assigned when even one location is found on the installation with radon in excess of 4.0 pCi/L. The Commander, NAVEURAFCENT, stated that they expect to complete this update by October 2024.

Our Response

Comments from the Commander, NAVEURAFCENT, addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close this recommendation once we receive a copy of the updated NSA Naples Radon Management Plan to verify that NSA Naples accurately categorized RPCs in accordance with the NAVRAMP.

- b. **Monitor the contractor's execution of the contracted radon testing services for all Government-owned and Government-controlled unaccompanied housing and nonresidential facilities, including the 10 rooms with continued elevated radon levels, to ensure that adjustments to the radon mitigation systems resolve the elevated radon levels and the required testing is performed.**

Management Actions Taken

NSA Naples officials took corrective action to address their failure to comply with NAVRAMP timelines for testing and mitigating radon levels that are at or exceed the 4.0 pCi/L threshold. Specifically, on September 15, 2023, NAVFAC Atlantic awarded a \$588,359 contract to have all GO-GC unaccompanied housing and GO-GC nonresidential facilities tested for radon. NAVFAC officials stated that the contracted radon testing services are tentatively scheduled to begin in August 2024, and will include a retest of the 10 rooms located in the GO-GC nonresidential facilities that continued to have elevated radon levels.

Commander, Navy Region Europe, Africa, Central Comments

The Commander, NAVEURAFCENT, responding for NSA Naples, agreed with the recommendation and reiterated that contracted radon testing services are tentatively scheduled to begin in August 2024 and conclude around August 2025. The Commander stated that they anticipate providing the results of the testing in November 2025.

Our Response

Management action taken and comments from the Commander, NAVEURAFCENT, addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation when we receive a copy of the test results to verify that NSA Naples contracted personnel completed the required testing.

- c. Update the Naval Support Activity Naples Radon Awareness Shore Enterprise Strategic Communication Plan to inform DoD personnel that Naval Support Activity Naples is a radon potential category 1 installation with a known potential for elevated radon levels.**

Commander, Navy Region Europe, Africa, Central Comments

The Commander, NAVEURAFCENT, responding for NSA Naples, agreed with the recommendation and stated that they will update the NSA Naples Radon Awareness Shore Enterprise Strategic Communication Plan to clarify the meaning of RPC 1. The Commander stated that they will also include an advisement that fluctuates over time and with changes in the environment's radon levels. The Commander stated that they anticipate completing these updates by October 2024.

Our Response

Comments from the Commander, NAVEURAFCENT, addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once we receive a copy of the updated NSA Naples Radon Awareness Shore Enterprise Strategic Communication Plan to verify that NSA Naples personnel documented the installation's status as an RPC 1 with known potential for elevated radon levels.

- d. Ensure that communications inform DoD personnel stationed at Naval Support Activity Naples and living in non-Government-Owned and Government-Controlled off-base housing of their ability to test their homes for radon and work with the lessor to address any identified issues, as outlined in the Naval Support Activity Naples Housing lease.**

Commander, Navy Region Europe, Africa, Central Comments

The Commander, NAVEURAFCENT, responding for NSA Naples, agreed with the recommendation and stated that, in December 2023, the lease contract was modified and the ability to test is now clearly stated in section 18 of the off-base lease contract. The Commander explained that all new arrivals to NSA Naples are also provided the information during the area orientation. The Commander stated that they anticipate that, by September 2024, they will add a slide to the area orientation presentation dedicated to the topic of leasing.

Our Response

Comments from the Commander, NAVEURAFCENT, addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We verified that the NSA Naples non-GO-GC off-base lease contract authorizes the tenant to test the home for radon. We will close the recommendation once we receive a copy of the updated NSA Naples area orientation presentation to verify it includes communication of non-GO-GC off-base housing personnel's ability to test and work with their lessor to address any radon issues.

Recommendation 2

We recommend that the Commander, Naval Facilities Engineering Systems Command, update the Navy Radon Assessment and Mitigation Program Guidebook to:

- a. Require that installation radon communication plans address the known radon potential category levels at each installation outside the continental United States.**

Commander, Naval Facilities Engineering Systems Command Comments

The NAVFAC Inspector General, who was directed by the NAVFAC Commander to respond on their behalf, agreed with the recommendation and stated that RPC levels at each installation world-wide are provided via the installation's Radon Management Plan. The Inspector General explained that the installation's Radon Management Plan should serve as the primary reference document for execution of the radon program and that the NAVRAMP includes templates that cover each RPC scenario for developing the Radon Management Plan. The Inspector General stated the NAVRAMP also includes templates for developing the installation Risk Communication Plan, which includes information on notifying and relaying information regarding radon testing, monitoring and mitigation to installation personnel and potentially impacted occupants of industrial, office, and residential buildings. The Inspector General further explained that the installation's Risk Communication Plan should include the procedures for the release of current and historical data on file upon request by legitimate stakeholders and the Risk Communication Plan should be contained or cited in the Radon Management Plan. Finally, the Inspector General stated that the installation's Risk Communication Plan describes the measures that will be used at the installation to keep all stakeholders fully informed of the findings and significance of any past or present radon projects; whereas the Radon Management Plan outlines the methods and procedures that the installation employs to meet NAVRAMP requirements.

Our Response

Although the NAVFAC Inspector General agreed with the recommendation, comments from the Inspector General did not address the specifics of the recommendation; therefore, the recommendation is unresolved. While we agree that the NAVRAMP requires installations to communicate their overall RPC in the Radon Management Plan, the NAVRAMP's template for the Risk Communication Plan does not explicitly require the installation to address known RPC levels. We agree with the Inspector General's statement that the Radon Management Plan and Risk Communication Plan complement each other to provide a successful radon program and we understand that the installation should reference the Risk Communication Plan in the Radon Management Plan. However, the NAVRAMP states that the purpose of the Risk Communication Plan is to ensure all stakeholders are informed and understand the installation's purpose, process, and expectations for radon testing. As such, requiring inclusion of information about the installation's known RPC levels in these communication plans could be essential to an individual's understanding of radon exposures at their installation. Therefore, we request that within 30 days of the final report, the Commander, NAVFAC, reconsider their position and provide comments to the final advisory which address whether NAVFAC will update the NAVRAMP to explicitly require installations to communicate the known RPC levels in their Risk Communication Plan.

- b. Require that radon potential category levels are communicated to DoD personnel assigned to the installation, including individuals living in non-Government-Owned and Government-Controlled off-base housing.**

Commander, Naval Facilities Engineering Systems Command Comments

The NAVFAC Inspector General, who was directed by the NAVFAC Commander to respond on their behalf, agreed with the recommendation and stated that the NAVRAMP's required installation Risk Communication Plan addresses communication of RPC levels. The Inspector General reiterated that the NAVRAMP includes templates for developing the installation Risk Communication Plan and those templates include suggested communication to stakeholders on- and off-installation. Additionally, the Inspector General stated that NAVFAC's targeted and specific communication protocols would be incorporated into the Navy's guidance upon issuance of policy from the DASD for Housing related to Recommendation 3.a of this management advisory.

Our Response

Although the NAVFAC Inspector General agreed with the recommendation, comments from the Inspector General did not address the specifics of the recommendation; therefore, the recommendation is unresolved. While we agree that the NAVRAMP includes Risk Communication Plan templates that list examples of on- and off-installation stakeholders and methods for communication, the templates do not explicitly require communication of information to give stakeholders a basic understanding of RPCs. As we explain in our response to Recommendation 2.a of this advisory, requiring inclusion of information about the installation's known RPC levels in the Risk Communication Plan could be essential to an individual's understanding of radon exposures at their installation. Similarly, requiring inclusion of general information to define RPCs could increase the stakeholders' general understanding of information an installation communicates to them about radon. Additionally, the NAVRAMP states that one objective of the installation's communication with stakeholders should be to increase knowledge and understanding of radon. Therefore, we request that within 30 days of the final report, the Commander, NAVFAC, reconsider their position and provide comments to the final advisory that address whether NAVFAC will update the NAVRAMP to explicitly require installations to include general information on RPC levels in their Risk Communication Plan.

Recommendation 3

We recommend that the Deputy Assistant Secretary of Defense for Housing:

- a. Develop and implement policy to ensure DoD personnel living in non-Government-Owned and Government-Controlled off-base housing are made aware of known elevated radon levels at installations outside the continental United States.**

Deputy Assistant Secretary of Defense for Housing Comments

The DASD for Housing agreed with the recommendation and stated that they will develop and implement the recommended policy.

Our Response

Comments from the DASD for Housing addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once we are provided with the new policy to verify that the DASD for Housing included requirements to ensure DoD personnel living in non-GO-GC off-base housing are made aware of known elevated radon levels at OCONUS installations in the implemented policy.

- b. Conduct a review to determine whether the DoD has the authority to provide at-home radon test kits to DoD personnel living in non- Government-Owned and Government-Controlled off-base housing at installations outside the continental United States.**

Deputy Assistant Secretary of Defense for Housing Comments

The DASD for Housing agreed with the recommendation and stated that they will conduct the recommended review.

Our Response

Comments from the DASD for Housing addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once we receive the results of the review to verify the DASD for Housing completed the review and documented their determination.

- c. If the DoD determines it has the authority to provide at-home radon test kits, issue guidance to the Services on providing at-home radon test kits to DoD personnel living in non-Government-Owned and Government-Controlled off-base housing at installations outside the continental United States.**

Deputy Assistant Secretary of Defense for Housing Comments

The DASD for Housing partially agreed with the recommendation and stated that if the Department determines that it has the authority to provide at-home radon test kits to DoD personnel, the DASD for Housing will work with the Office of the Under Secretary of Defense for Personnel and Readiness to determine the correct office to issue the recommended guidance. The Office of the Under Secretary of Defense for Personnel and Readiness is the lead organization in the DoD for promoting the health, well-being, and safety of the Total Force.

Our Response

Comments from the DASD for Housing addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once the DASD for Housing provides documentation to support their determination regarding the DoD's authority to provide DoD personnel with at-home radon test kits. Furthermore, if the DASD for Housing determines that it is within their authority to provide at-home radon test kits, we will close this recommendation when we receive a copy of the implemented guidance developed for the Services to provide at-home radon test kits to DoD personnel living in non-GO-GC off-base housing at OCONUS installations.

Recommendation 4

We recommend that the Commander of Navy Region Europe, Africa, Central conduct a review of the Naval Support Activity Naples Housing Office inspection services to determine if the housing inspection program can perform radon testing under the authorities already being executed and implement the results accordingly.

Commander, Navy Region Europe, Africa, Central Comments

The Commander, NAVEURAFCENT, agreed with the recommendation and stated that they conducted the suggested review of the NSA Naples Housing Office inspection services program. The review determined that the program is operating in full compliance with Commander, Navy Installations Command Manual 11103.1.¹⁶ The Commander stated that NAVEURAFCENT's inspection process authorizes a brief visual inspection of potential off-base rental properties for basic health and safety issues. However, radon testing requires months, if not a year or longer, of constant monitoring before they can obtain reliable results. The Commander explained that, even after such lengthy testing, radon levels vary based on several environmental factors beyond anyone's control. The Commander stated that the logistics of such a program are not envisioned in the current policy and would require new guidance from higher headquarters which take into account several equities beyond one installation or one region.

Our Response

Comments from the Commander, NAVEURAFCENT, addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close this recommendation once we receive documentation to verify that NAVEURAFCENT completed their review of the NSA Naples housing program and documented the results.

¹⁶ Commander, Navy Installations Command Manual 11103.1, "Housing Referral Services," August 1, 2019.

Management Comments

Deputy Assistant Secretary of Defense for Housing



ENERGY, INSTALLATIONS,
AND ENVIRONMENT

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
3400 DEFENSE PENTAGON
WASHINGTON, DC 20301-3400

July 3, 2024

MEMORANDUM FOR DIRECTOR, PROGRAM DIRECTOR FOR AUDIT READINESS
AND GLOBAL OPERATIONS, OFFICE OF THE INSPECTOR
GENERAL

SUBJECT: Response to Management Advisory on Concerns with Elevated Radon at Naval
Support Activity Naples (Project No. D2023-D000RJ -0155.001)

As requested, I am providing responses to the general content and recommendations
contained in the subject advisory.

Recommendation 3.a:

The Deputy Assistant Secretary of Defense for Housing develop and implement policy to ensure
DoD personnel living in non-Government-Owned and Government-Controlled off-base housing
are made aware of known elevated radon levels at installations outside the continental United
States.

Response:

Concur. The Deputy Assistant Secretary of Defense for Housing (DASD[H]) will develop and
implement the requested policy.

Recommendation 3.b:

The Deputy Assistant Secretary of Defense for Housing conduct a review to determine
whether the DoD has the authority to provide at-home radon test kits to DoD personnel living
in non- Government-Owned and Government-Controlled off-base housing at installations
outside the continental United States.

Response:

Concur. The DASD(H) will conduct the requested review.

Recommendation 3.c:

If the DoD determines it has the authority to provide at-home radon test kits, the Deputy
Assistant Secretary of Defense for Housing shall issue guidance to the Services on providing at-
home radon test kits to DoD personnel living in non-Government-Owned and Government-
Controlled off-base housing at installations outside the continental United States.

Response:

Partially Concur. If the Department determines it has the capability of providing at-home
radon test kits to DoD personnel, the DASD(H) will work with the Office of the Under
Secretary of Defense for Personnel and Readiness (OUSD[P&R]) to determine the correct
office to issue the requested guidance. The OUSD(P&R) is the lead organization in the
Department of Defense for promoting the health, well-being, and safety of the Total Force.

Deputy Assistant Secretary of Defense for Housing (cont'd)

Please contact [REDACTED] if additional information is required.

COLON.MARK.C. Digitally signed by COLON.MARK.C. [REDACTED]

C. [REDACTED]
Mark C. Colón
Deputy Assistant Secretary of Defense (Housing)

Naval Facilities Engineering Systems Command



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND
1322 PATTERSON AVENUE, SE SUITE 1000
WASHINGTON NAVY YARD DC 20374-5065

7500.1
Ser 09IG/018
8 Jul 2024

From: Commander, Naval Facilities Engineering Systems Command
To: Director for Audit Readiness and Global Operations, Department of Defense Office of the Inspector General

Subj: NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ADVISORY RESPONSE TO AUDIT D2023-D000RJ-0155.001, CONCERNS WITH ELEVATED RADON LEVELS AT NAVAL SUPPORT ACTIVITY NAPLES

Ref: (a) SECNAVINST 5200.34E

Encl: (1) Advisory Response to Audit D2023-D000RJ-0155.001
(2) Navy Radon Assessment and Mitigation Program (NAVRAMP) Guidebook

1. Per reference (a), enclosures (1) and (2) are forwarded for review. The Naval Facilities Engineering Systems Command (NAVFAC) is requesting closure for recommendations 2a and 2b.

2. NAVFAC Headquarters' point of contact is [REDACTED].

FICHTER,STEPHEN
JOSEPH [REDACTED]
[REDACTED]
S. J. FICHTER
By direction

Naval Facilities Engineering Systems Command (cont'd)

**NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND (NAVFAC)
DEPARTMENT OF DEFENSE MANAGEMENT ADVISORY: CONCERNS WITH
ELEVATED RADON LEVELS AT NAVAL SUPPORT ACTIVITY NAPLES,
PROJECT NO. D2023-D000RJ-0155.001
DATE: 10 JUNE 2024**

RECOMMENDATION 2: We recommend that the Commander, Naval Facilities Engineering Systems Command update the Navy Radon Assessment and Mitigation Program Guidebook to:

- a. Require that installation radon communication plans address the known radon potential category levels at each installation outside the continental United States.
- b. Require that radon potential category levels are communicated to DoD personnel assigned to the installation, including individuals living in non-Government-Owned and Government-Controlled off-base housing.

CURRENT STATUS: Concur. Please see below.

a. NAVFAC's current process addresses Radon Potential Category (RPC) in current plans. RPC is a dynamic category assigned by NAVFACSYSCOM, based on historical radon testing data to a naval installation or site which designates its potential for having radon levels. RPC levels at each installation world-wide are provided via the installation Radon Management Plan (RMP). Navy Radon Assessment and Mitigation Program (NAVRAMP) Guidebook (May 9, 2023) Appendix C, includes templates for developing the installation RMP. See enclosure (2). All installations, regardless of radon potential, must develop and maintain their RMP. The purpose of an installation RMP is to serve as the primary reference document for execution of radon program. RMP templates also include each RPC category scenario. The RMPs are reviewed and updated every 5 years or as needed to ensure that the information within the document is current.

NAVRAMP Guidebook, Appendix D includes templates for Radon Information Handouts and templates for developing the installation Risk Communication Plans (RCP). See enclosure (2). Installation's RCP includes information on notifying and relaying information regarding radon testing, monitoring and mitigation to installation personnel and potentially affected occupants of industrial, office, or residential buildings. Prior to the initiation of radon testing, each installation is required to develop a RCP. The purpose of this RCP is to ensure that all stakeholders are informed and understand the installation's purpose for initiating radon testing, what the process is, and what to expect in terms of sharing results and other actions that may be necessary based on those results. The RCP should include the procedures for the release of current survey data but also any historical data on file at the installation upon request by legitimate stakeholders.

Installation RCP describes the measures that will be used at the installation to keep all stakeholders fully informed of the findings and significance of any past or present radon projects, whereas the RMP outlines the methods and procedures that the installation is employing to meet NAVRAMP. The two documents, although different in function, complement and support each other to ensure a successful radon program. Under NAVRAMP Guidebook, the RCP should be

Enclosure (1)

Naval Facilities Engineering Systems Command (cont'd)

either contained or cited in the RMP, which as stated above includes RPC levels. NAVFAC considers this action complete.

b. NAVFAC's current process via the installation RCP addresses communication of RPC levels. As discussed under Recommendation 2a, NAVRAMP Guidebook, Appendix D includes templates for developing the installation RCP for each installation world-wide. See enclosure (2). Section 4 Audience and Stakeholders under the RCP template includes communication to audiences such as On-installation residents and Off-installation residents. Additional templates under the RCP template include Appendix A - Public Affairs Guidance, Appendix B - Radon Gas Frequently Asked Questions, Appendix C - Commanding Officer Talking Points, Appendix D - Public Affairs Office Note, Appendix E - Housing Residential Letter, and Appendix F - Primary Points of Contact. See enclosure (2) pages 165 through 261. The templates can be modified in whole or in part by the installations to meet this requirement. Various stakeholder communication channels include meetings, townhalls, emails, base newspaper, notification letters, social media, AFN TV/radio, etc.). NAVFAC's targeted and specific communication protocols for Recommendation 2b should be incorporated into the Navy's guidance upon issuance of policy from Deputy Assistant Secretary of Defense for Housing related to Recommendation 3a - *develop and implement policy to ensure DoD personnel living in non-Government-Owned and Government-Controlled off-base housing are made aware of known elevated radon levels at installations outside the continental United States*. NAVFAC considers this action complete.

DATE COMPLETED: 1 July 2024

Enclosure (1)

Navy Region Europe, Africa, Central



DEPARTMENT OF THE NAVY
COMMANDER
NAVY REGION EUROPE, AFRICA, CENTRAL
PSC 817 BOX 108
FPO AE 09622-0108

5041
Ser N00/355
27 Jun 24

From: Commander, Navy Region Europe, Africa, Central
To: Inspector General, U.S. Department of Defense

Subj: NAVY REGION EUROPE, AFRICA, CENTRAL AND NAVAL SUPPORT
ACTIVITY NAPLES RESPONSES TO MANAGEMENT ADVISORY: CONCERNS
WITH ELEVATED RADON LEVELS AT NAVAL SUPPORT ACTIVITY NAPLES,
PROJECT NO. D2023-D000RJ-0155.001

1. The following information is provided in response to the recommendations contained in subject report directed to both Navy Region Europe, Africa, Central and Naval Support Activity (NSA) Naples. We will provide additional notice to your office when we complete each item.

a. Recommendation 1a. We recommend that the Commander of NSA Naples update the NSA Naples Radon Management Plan to accurately categorize radon potential categories at NSA Naples in accordance with the Navy Radon Assessment and Mitigation Program Guidebook.

b. Response to 1a. Concur. When we update the NSA Naples Radon Management Plan we will clarify the meaning of RPC1, that it is not related to the EPA RPC, and that it is the level awarded when even one location is found on the installation with radon in excess of 4.0 Pic/L. Expected date of completion is October 2024.

c. Recommendation 1b. We recommend that the Commander of NSA Naples monitor the contractor's execution of the contracted radon testing services for all Government-owned and Government-controlled unaccompanied housing and non-residential facilities, including the 10 rooms with continued elevated radon levels, to ensure that adjustments to the radon mitigation systems resolve the elevated radon levels and the required testing is performed.

d. Response to 1b. Concur. Contracted radon testing services are tentatively scheduled to begin in August 2024 and are scheduled to conclude on or about August 2025. The monitors will then be sent to the contractor to read. Publication of the results is anticipated to occur in October 2025. We will provide the results of that testing within a month of our receipt of same. Expected date of completion is November 2025.

e. Recommendation 1c. We recommend that the Commander of NSA Naples update the NSA Naples Radon Awareness Shore Enterprise Strategic Communication Plan to inform Department of Defense (DoD) personnel that NSA Naples is a radon potential category one installation with a known potential for elevated radon levels.

Navy Region Europe, Africa, Central (cont'd)

Subj: NAVY REGION EUROPE, AFRICA, CENTRAL AND NAVAL SUPPORT
ACTIVITY NAPLES RESPONSES TO MANAGEMENT ADVISORY: CONCERNS
WITH ELEVATED RADON LEVELS AT NAVAL SUPPORT ACTIVITY NAPLES,
PROJECT NO. D2023-D000RJ-0155.001

f. Response to 1c. Concur. When we update the NSA Naples Radon Awareness Shore Enterprise Strategic Communication Plan we will clarify the meaning of RPC1, that it is not related to the EPA RPC, and that it is the level awarded when even one location is found on the installation with radon in excess of 4.0 PiC/L. We will also include the advisement that radon can and does fluctuate over time and with changes in the environment. Expected date of completion is October 2024.

g. Recommendation 1d. We recommend that the Commander of NSA Naples ensures that communications inform DoD personnel stationed at NSA Naples and living in non-Government-owned and Government-controlled off-base housing of their ability to test their homes for radon and work with the lessor to address any identified issues, as outlined in the NSA Naples Housing lease.

h. Response to 1d. Concur and actions partially complete. The right to test is now clearly stated in the off-base lease contract (section 18). All new arrivals to the NSA Naples installation are also provided this information during the area orientation. The contract was modified in December 2023. A slide dedicated to this topic will be added to the area orientation presentation as soon as solutions are determined to likely questions regarding testing and follow on actions. Expected date of completion for the slide update is September 2024.

i. Recommendation 4. We recommend that the Commander of Navy Region Europe, Africa, Central conduct a review of the NSA Naples Housing Office inspection services to determine if the housing inspection program can perform radon testing under the authorities already being executed and implement the results accordingly.

j. Response to 4: Concur and action complete. We have conducted the suggested review of the NSA Naples Housing Office inspection services program. The program is operating in full compliance with Commander, Navy Installations Command Manual 11103.1 as currently written. Our inspection process authorizes a brief visual inspection of potential off-base rental properties for basic health and safety issues. Radon testing, however, requires months, if not a year or longer of constant monitoring before reliable results can be obtained. Furthermore, even after such lengthy testing, the radon levels can and will vary dependent on several environmental factors beyond anyone's control. The logistics of such a program are not envisioned in the current policy and would require new guidance from higher headquarters which take into account several equities beyond one installation or one region.

2. My point of contact for this project is [REDACTED].



B. J. COLLINS

Whistleblower Protection

U.S. DEPARTMENT OF DEFENSE

Whistleblower Protection safeguards DoD employees against retaliation for protected disclosures that expose possible fraud, waste, and abuse in Government programs. For more information, please visit the Whistleblower webpage at www.dodig.mil/Components/Administrative-Investigations/Whistleblower-Reprisal-Investigations/Whistleblower-Reprisal/ or contact the Whistleblower Protection Coordinator at Whistleblowerprotectioncoordinator@dodig.mil

For more information about DoD OIG reports or activities, please contact us:

Congressional Liaison

703.604.8324

Media Contact

public.affairs@dodig.mil; 703.604.8324



www.twitter.com/DoD_IG

LinkedIn

www.linkedin.com/company/dod-inspector-general/

DoD Hotline

www.dodig.mil/hotline





DEPARTMENT OF DEFENSE | INSPECTOR GENERAL

4800 Mark Center Drive
Alexandria, VA 22350-1500
www.dodig.mil
DoD Hotline 1.800.424.9098

