

Enhancing Mission Readiness

Transforming Military Apartments at Randolph Pointe with a Scientifically Validated 7-Step Process

Military families deserve living spaces that safeguard their health and well-being. At Randolph Pointe in Fayetteville, NC, Vitacorps transformed on-post housing through a proven 7-Step Process, delivering tangible results that improved the quality of life for service members and their families.

The challenge

Military personnel spend approximately 90% of their time indoors, making healthy living spaces essential for resilience, readiness and retention. Therefore, Corvias was determined to assess and enhance the indoor environmental quality (IEQ) at their Randolph Pointe residences quickly and scientifically, ensuring minimal disruption to residents.

The solution

Corvias engaged Vitacorps to deploy its scalable, science-backed **7-Step Process** to evaluate and enhance IEQ. This comprehensive approach included:

- 1. Assessment:** An in-depth analysis of housing conditions identified critical areas for improvement in air, water and lighting quality.
- 2. Pre-Intervention Measurement:** Scientific baseline measurements revealed several challenges, such as high PM2.5 levels, water contaminants (such as PFAS and lead) and circadian-disrupting lighting conditions.
- 3. Prescription:** Customized wellness solutions – air purification, water filtration, and circadian lighting – were designed to exceed industry standards and guidelines.
- 4. Installation:** Wellness solutions were seamlessly installed in the homes, minimizing any disruptions in the day-to-day life of the residents.
- 5. Post-Intervention Performance Validation:** Testing confirmed significant improvements in air quality, water safety, and lighting conditions.

To maintain the long-term effectiveness of the program, Vitacorps will administer the last two steps on an ongoing basis.

6. Annual Maintenance & Performance Validation: Scheduled service appointments will ensure that ongoing performance meets industry benchmarks and will assess resident satisfaction.

7. Annual Reporting & Analysis: Annual reporting and real-time updates maintain transparency and trust with stakeholders.



The Results

The impact was immediate and measurable:



Air Quality

PM2.5 concentrations dropped by **68.1–73.6%** across different rooms, with peak levels returning to baseline levels **8 times faster**, ensuring cleaner air.



Water Quality

Achieved **100% removal** of six out of seven PFAS species and reduced contaminants like lead by **100%**.



Lighting Quality

Daytime light exposure rose by **211%**, while nighttime light exposure fell by **99.95%**, creating conditions for healthier sleep-wake cycles.



The air quality feels so much better – I've noticed fewer allergy symptoms in my children.
– Randolph Pointe Resident

Resident Satisfaction surveys showed



Science Driven Wellness for Resilient Military Communities

WHY IT MATTERS

Transforming living spaces directly supports the **readiness, resilience and retention** of service members. Healthier homes lead to:

- Fewer respiratory illnesses and better sleep.
- Enhanced mental and physical performance.
- Increased trust and morale among military families.

SETTING A NEW EXPECTATION

Randolph Pointe homes were elevated to meet **EPA standards and exceed international guidelines**, becoming a benchmark for wellness-focused military housing. Residents now experience cleaner air, safer water and an overall environment optimized for well-being.

SCALABLE SOLUTIONS FOR THE FUTURE

Vitacorps' process ensures:

- **Zero Displacement:** Families remain in their homes during upgrades.
- **No Major Renovations:** Solutions integrate seamlessly with existing infrastructure.
- **Third Party Validation:** Scientific results confirm measurable health benefits.

THE ROAD AHEAD

With **88% of residents** expressing interest in additional wellness solutions, Randolph Pointe has become a model for scaling this innovative program nationwide. Vitacorps is committed to maintaining these improvements through annual testing and reporting, ensuring lasting results for those who protect us.

Conclusion

Vitacorps' transformative work at Randolph Pointe is a testament to how data-driven, science-backed interventions can deliver healthier, happier homes for military families, strengthening communities and enhancing mission readiness.