



Howard County
Health Department

Bureau of Environmental Health
7178 Gateway Drive Columbia, MD 21046
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

February 8, 2012

Mr. and Mrs. Scott Sokolowski
7100 Ramsgate Court
Clarksville, Maryland 21029-1738

RE: 7100 Ramsgate Court
Clarksville, Maryland 21029-1738

Dear Mr. and Mrs Sokolowski:

Follow-up testing was performed on January 11, 2012 and samples submitted to Florida Radiochemistry (FRC) to assess the possible presence of **Gross Alpha** and **Gross Beta** in your well water supply. Short and long term **Gross Alpha** and **Gross Beta** along with **Radium 226 / 228** samples were collected to assess the full spectrum of current levels and to see if treatment is necessary.

Results from this short term screening (sample collected from the kitchen faucet) revealed a **Gross Alpha** of 11.1 ± 1.7 picocuries/liter (pCi/L); while the **Gross Beta** level was 15.9 ± 1.3 pCi/L. The **Gross Alpha** result was below the **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** level was below the targeted value of 50 pCi/L (roughly equivalent to the **annual dose rate** of 4 millirems per year).

Results from this long term screening (sample also collected from the kitchen faucet) revealed a **Gross Alpha** of 4.9 ± 1.5 picocuries/liter (pCi/L); while the **Gross Beta** level was 16.4 ± 1.6 pCi/L. The **Gross Alpha** result was below the **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** level was below the targeted value of 50 pCi/L (roughly equivalent to the **annual dose rate** of 4 millirems per year).

Results from **Radium 226 / 228** revealed a **Radium 226** level of 4.2 ± 0.3 pCi/L; while the **Radium 228** level was 4.8 ± 0.9 pCi/L. These naturally occurring isotopes of radium are considered the most important due to their longer half-lives and health significance. Here the **combined Radium 226 / 228** was above the **MCL** of 5 pCi/L.

Even though both short and long term **Gross Alpha** and **Gross Beta** levels were below their existing **MCL** and targeted value respectively, it appears that the long term contaminant make-up was significantly **Radium 226 / 228**. Given the elevated level for **Radium 226 / 228**, the Health Department would recommend the installation of treatment. Typically, these types of contaminants are readily treated with the use of a water softener or reverse osmosis (R/O) system.

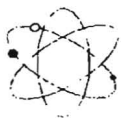
A copy of the test results is enclosed for your information. Please call this office at 410-313-1773 if you have further questions or following installation of treatment, wish to schedule additional testing.

Sincerely,

Bert Nixon, Director
Bureau of Environmental Health

Enclosure

cc: Barry Glotfelty, MDE, Water Mgmt.
Well & Septic file



Florida Radiochemistry Services, Inc.

Analysis Report

| Lab Sample I.D. | 1201135-01 | 1201135-02 | 1201135-03 |
|-----------------|----------------|-----------------|------------|
| Client I.D. | HC7100L (LONG) | HC7100S (SHORT) | HC7100 |
| Gross Alpha | 4.9 | 11.1 | |
| Error +/- | 1.5 | 1.7 | |
| MDL | 1.2 | 1.2 | |
| EPA Method | 900.0 | 900.0 | |
| Prep Date | 01/30/12 | 01/20/12 | |
| Prep Time | 06:21 | 06:16 | |
| Analysis Date | 01/31/12 | 01/21/12 | |
| Analysis Time | 06:50 | 13:23 | |
| Analyst | MJN | MJN | |
| Gross Beta | 16.4 | 15.9 | |
| Error +/- | 1.6 | 1.3 | |
| MDL | 1.7 | 1.5 | |
| EPA Method | 900.0 | 900.0 | |
| Prep Date | 01/30/12 | 01/20/12 | |
| Prep Time | 06:21 | 06:16 | |
| Analysis Date | 01/31/12 | 01/21/12 | |
| Analysis Time | 06:50 | 13:23 | |
| Analyst | MJN | MJN | |
| Radium 226 | | | 4.2 |
| Error +/- | | | 0.3 |
| MDL | | | 0.2 |
| EPA Method | | | 903.1 |
| Prep Date | | | 01/23/12 |
| Prep Time | | | 08:38 |
| Analysis Date | | | 01/30/12 |
| Analysis Time | | | 10:16 |
| Analyst | | | MJN |
| Radium 228 | | | 4.8 |
| Error +/- | | | 0.9 |
| MDL | | | 1.0 |
| EPA Method | | | Ra-05 |
| Prep Date | | | 01/23/12 |
| Prep Time | | | 08:38 |
| Analysis Date | | | 01/30/12 |
| Analysis Time | | | 11:14 |
| Analyst | | | SN |
| Units | pCi/l | pCi/l | pCi/l |