

# Accepted Manuscript

Radium geochemical monitoring in well waters at regional and local scales: An environmental impact indicator-based approach

François Lagacé, Delphine Foucher, Céline Surette, Olivier Clarisse



PII: S0045-6535(18)30747-1

DOI: [10.1016/j.chemosphere.2018.04.098](https://doi.org/10.1016/j.chemosphere.2018.04.098)

Reference: CHEM 21246

To appear in: *ECSN*

Received Date: 13 December 2017

Revised Date: 23 March 2018

Accepted Date: 16 April 2018

Please cite this article as: Lagacé, Franç., Foucher, D., Surette, Cé., Clarisse, O., Radium geochemical monitoring in well waters at regional and local scales: An environmental impact indicator-based approach, *Chemosphere* (2018), doi: 10.1016/j.chemosphere.2018.04.098.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

1 **Radium geochemical monitoring in well waters at regional and local scales: an environmental**  
2 **impact indicator-based approach**

3

4 François Lagacé, Delphine Foucher, Céline Surette, Olivier Clarisse\*

5

6 *Department of Chemistry and Biochemistry, Université de Moncton,*

7 *18 Avenue Antonine Maillet, Moncton, NB, Canada E1A 3E9*

8

9 \* Corresponding author: Tel. +1 506 858 4313, Fax. +1 506 858 4541

10 E-mail: olivier.clarisse@umoncton.ca

11

12 **Highlights**

- 13 • A  $^{226}\text{Ra}$  geochemical monitoring approach is designed to assess anthropogenic impact
- 14 •  $^{226}\text{Ra}$  well water levels showed low spatial variability at local and regional scales
- 15 •  $^{226}\text{Ra}$  well water levels demonstrated strong seasonal and year-to-year stability
- 16 •  $^{226}\text{Ra}$  baseline level was determined as a first step of a surveillance program

17

18

19

20 **Keywords:** radium, well-water, spatial-distribution, temporal-variability, elemental-correlation,

21 partitioning

22

Download English Version:

<https://daneshyari.com/en/article/8851067>

Download Persian Version:

<https://daneshyari.com/article/8851067>

[Daneshyari.com](https://daneshyari.com)