

1. Record Nr.	UNINA9911006558903321
Autore	Agency International Atomic Energy
Titolo	Radioelement Mapping
Pubbl/distr/stampa	Lanham : , : International Atomic Energy Agency, , 2010 ©2010
ISBN	1-5231-3030-X 1-282-99144-2 9786612991448
Edizione	[1st ed.]
Descrizione fisica	1 online resource (123 pages)
Altri autori (Persone)	AgencyInternational Atomic Energy
Soggetti	Gamma ray spectrometry Geochemical surveys
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Cover -- Foreword -- Contents -- 1. Introduction -- 1.1. Background -- 1.2. Objective -- 1.3. Scope -- 1.4. Structure -- 2. Benefits And Uses Of A Global Radioelement Baseline Database -- 2.1. Uranium Exploration -- 2.2. Uranium Mine And Mill Waste -- 2.3. Nuclear Emergency Preparedness -- 2.4. Geoscience Applications -- 2.5. Health And Environmental Applications -- 3. Methodology To Establish A Radioelement Base Lineusing Gamma Spectrometry -- 3.1. Principles Of Gamma Ray Spectrometry -- 3.2. Establishment Of Gamma Ray Spectrometer Calibration Facilities -- 3.3. Standardization Among Gamma Ray Spectrometer Calibration Facilities -- 3.4. Back Calibration Of Existing Surveys -- 3.5. Merging Of Surveys -- 3.6. Responses Of Anthropogenic Radioelements -- 4. Methodology To Establish Radioelement Baselines Using Geochemistry -- 4.1. Principles Of Applied Geochemistry -- 4.2. Analytical Methods -- 4.3. Media Types -- 4.4. Data Management And Interpretation -- 5. Status Of Radioelement Mapping -- 5.1. Airborne Gamma Ray Spectrometric Surveys -- 5.2. Sample Based Geochemical Surveys -- 6. Application Of Radioelement Baselines To Uranium Exploration, Mining, Milling And Remediation -- 6.1. Use Of Baselines To Aid In Uranium Exploration -- 6.2. Baselines Prior To Mine Or Mill Construction -- 6.3. Monitoring

During Operations -- 6.4. Assessment Of Contamination Episodes --
6.5. Use Of Baselines To Monitor The Remediation Process -- 7.
Conclusions -- Appendix I - Worldwide Coverage And Catalogue Of
Public Domain gamma Spectrometry Surveys -- Appendix II - Worldwide
Gamma Ray Spectrometer Calibration Sites -- References --
Bibliography -- Contributors To Drafting And Review.

Sommario/riassunto

The publication is based on the coordinated work of highly experienced, international experts with the aim of developing a global radioelement map with comparable results from different states. It is intended to support the identification of prospective areas for uranium exploration and mining, and also for environmental actions associated with uranium production and other human activities. The utility of the publication is expected to motivate many states to standardize the status of their radioelement mapping based on the global development and experience.
