1. Record Nr. UNISALENTO991001155689707536

Titolo	Food colours / edited by Victoria Emerton
Pubbl/distr/stampa	Surrey : Leatherhead Oxford : Blackwell, 2008
ISBN	9781905224449
Descrizione fisica	xvi, 197 p. : ill. ; 24 cm
Collana	Ingredients handbook
Altri autori (Persone)	Emerton, Victoria
Disciplina	664.062
Soggetti	Coloring matter in food - Handbooks Food additives - Handbooks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index

2. Record Nr. UNINA9910970314603321

Titolo	Evaluation of guidelines for exposures to technologically enhanced naturally occurring radioactive materials / / Committee on Evaluation of EPA Guidelines for Exposure to Naturally Occurring Radioactive Materials Board on Radiation Effects Research Commission on Life Sciences National Research Council
Pubbl/distr/stampa	Washington, DC, : National Academy Press, 1999
ISBN	9786610186525 9780309183994 0309183995 9781280186523 1280186526 9780309580700 0309580706 9780585150024 0585150028
Edizione	[1st ed.]
Descrizione fisica	1 online resource (293 p.)
Disciplina	612/.01448
Soggetti	Radiation - Health aspects Low-level radiation - Health aspects Radiation, Background - Health aspects Radioactive pollution - Health aspects
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Evaluation of Guidelines for Exposures to Technologically Enhanced Naturally Occurring Radioactive... -- Copyright -- Preface -- Contents -- Executive Summary -- INTRODUCTION -- PURPOSE AND SCOPE OF STUDY -- RESPONSES TO COMMITTEE CHARGE -- Technical Basis for Differences in Guidelines for TENORM -- Relative Merits of Different Scientific and Technical Assumptions -- Development of Contemporary Risk Analysis for NORM -- OTHER CONCLUSIONS AND RECOMMENDATIONS -- Policy Judgments for Risk Management --

Consistency of Radiation Guidelines -- Importance of Natural Background for Guidelines for TENORM -- Importance of Knowledge of Sources of TENORM -- Differences in Approaches to Radiation Risk Assessment -- Use of Linear, No-threshold Dose-Response Hypothesis -- Directions for Further Research on TENORM -- 1 Introduction -- DEFINITION AND SCOPE OF STUDY -- THE RADIOACTIVE MATERIALS OF CONCERN -- APPROACH TO THE STUDY -- Evaluation of Guidelines for Indoor Radon -- Evaluation of Guidelines for TENORM Other Than Indoor Radon -- Other Considerations -- STRUCTURE OF THE REPORT -- 2 Natural Radioactivity and Radiation -- NATURALLY OCCURRING RADIONUCLIDES -- Uranium -- Radium-226 -- Thorium -- Radium-228 -- Radon -- Lead-210 and Polonium-210 -- Potassium-40 -- Rubidium-87 -- Induced Radionuclides -- NATURAL SOURCES OF EXTERNAL IONIZING RADIATION -- Terrestrial Sources of External Radiation -- Cosmic Radiation -- SUMMARY OF HUMAN EXPOSURES TO NATURAL IONIZING RADIATION -- CONCLUSIONS -- 3 Major Sources of Technologically Enhanced Naturally-Occurring Radioactive Materials -- URANIUM MINING -- PHOSPHATE-FERTILIZER AND ELEMENTAL-PHOSPHORUS PRODUCTION -- RESIDUES OF COAL COMBUSTION -- OIL AND NATURAL-GAS PRODUCTION AND PROCESSING -- MUNICIPAL WATER TREATMENT -- METAL MINING AND PROCESSING -- GEOTHERMAL ENERGY PRODUCTION -- OTHER INDUSTRIES. MINIMIZATION OF TENORM -- NONRADIOLOGIC IMPACTS -- CONCLUSIONS -- 4 Role of Exposure and Dose or Risk Assessments in Developing Radiation Standards -- RISK ASSESSMENT OF CARCINOGENS -- Hazard Identification -- Estimation of Dose-Response Relationship -- Exposure Assessment -- Risk Characterization -- ELEMENTS OF RADIATION RISK ASSESSMENT -- USE OF DOSE OR RISK ASSESSMENT IN DEVELOPING RADIATION STANDARDS -- SUITABLE APPROACHES TO RISK ASSESSMENT IN DEVELOPING STANDARDS -- 5 Basic Approaches to Regulating Radiation Exposures of the Public -- JUDGMENTS ABOUT ACCEPTABILITY OF HEALTH RISKS -- JUDGMENTS ABOUT ACCEPTABILITY OF HEALTH RISKS -- OTHER CONSIDERATIONS IN DEVELOPING STANDARDS -- Justification of Practices -- Measurability of Radioactivity In the Environment -- Natural Background Radiation -- SUMMARY -- 6 Organizations Concerned with Radiation Protection of the Public -- INTRODUCTION -- ENVIRONMENTAL PROTECTION AGENCY -- Federal Guidance On Radiation Protection of the Public -- Environmental Radiation Standards Developed Under Atomic Energy Act -- Environmental Radiation Standards Developed Under Other Laws -- Guidance and Regulations for Indoor Radon -- NUCLEAR REGULATORY COMMISSION -- DEPARTMENT OF ENERGY -- STATE GOVERNMENTS -- NATIONAL COUNCIL ON RADIATION PROTECTION AND MEASUREMENTS -- HEALTH PHYSICS SOCIETY -- INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION -- INTERNATIONAL ATOMIC ENERGY AGENCY -- COMMISSION OF THE EUROPEAN COMMUNITIES -- 7 Environmental Protection Agency Guidances and Regulations for Naturally Occurring Radionuclides -- GUIDANCE ON RADIATION PROTECTION OF THE PUBLIC -- GUIDANCE AND REGULATIONS FOR SPECIFIC SOURCES OR PRACTICES -- Standards for Operations of Uranium Fuel Cycle -- Standards for Radioactivity in Drinking Water -- Standards for Radioactivity in Liquid Discharges.
Standards for Uranium and Thorium Mill Tailings -- Standards for Management and Disposal of Radioactive Waste -- Standards for Cleanup of Radioactively Contaminated Sites -- Standards for Airborne Emissions of Radionuclides -- Guidance on Radon in Homes -- Applicability of EPA Guidances and Regulations to TENORM -- Other EPA Initiatives for TENORM -- Other Alternatives for EPA Regulation of

TENORM -- Risks Corresponding to EPA Guidances and Regulations -- CONSISTENCY OF DIFFERENT GUIDANCES AND REGULATIONS -- Differences in Statutory and Judicial Mandates -- Differences in Primary Bases of Standards -- Differences in Applicability of Standards -- Differences in Population Groups of Primary Concern -- Differences in Considerations of Natural Background -- Other Considerations in Comparing Standards -- Summary of Issues of Consistency of Standards -- RELATIONSHIP BETWEEN STANDARDS AND DOSES EXPERIENCED -- SUMMARY -- 8 Indoor-Radon Guidelines and Recommendations -- RADON MEASUREMENT UNITS -- PATHWAYS OF HUMAN EXPOSURE -- HEALTH EFFECTS AND RISK EVALUATION OF RADON EXPOSURE -- OVERVIEW OF RADON GUIDELINES AND RECOMMENDATIONS FOR DWELLINGS -- National Council on Radiation Protection and Measurements (NCRP) -- US Environmental Protection Agency -- International Commission on Radiological Protection -- International Atomic Energy Agency -- Commission of the European Communities -- Other -- RADON ACTION LEVELS FOR WORKPLACES -- SUMMARY AND CONCLUSIONS -- 9 Other Guidances for TENORM -- NATIONAL COUNCIL ON RADIATION PROTECTION AND MEASUREMENTS -- INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION -- HEALTH PHYSICS SOCIETY -- HPS Recommendations on Radiation Dose Limits for the General Public -- HPS Recommendations on Radiation Standards for Site Cleanup and Restoration -- NUCLEAR REGULATORY COMMISSION -- Regulations for Decommissioning of Licensed Facilities.
Guidance on Disposal of Residual Thorium or Uranium -- DEPARTMENT OF ENERGY -- Management and Disposal of Small Volumes of TENORM -- Management and Disposal of Larger Volumes of TENORM -- STATE STANDARDS AND GUIDELINES -- INTERNATIONAL ATOMIC ENERGY AGENCY -- COMMISSION OF THE EUROPEAN COMMUNITIES AND OTHER NATIONS -- TRANSFERABILITY OF STANDARDS -- 10 Comparison of Current Guidances for TENORM in the Environment -- INTRODUCTION -- INDOOR RADON -- TENORM OTHER THAN INDOOR RADON -- Guidances on Radiation Protection of the Public Applicable to TENORM -- Guidances for Specific Sources or Practices Involving TENORM -- Bases For Differences in Guidances -- SUMMARY -- 11 Issues in Developing Guidances for TENORM -- SCIENTIFIC AND TECHNICAL BASES FOR GUIDANCES -- DIFFERENCES IN TECHNICAL APPROACHES TO RISK ASSESSMENT -- Differences Between Environmental Protection Agency and Nuclear Regulatory Commission Approaches to... -- Comments On Differences Between Environmental Protection Agency and Nuclear Regulatory Commission... -- Importance of Approaches to Risk Assessment for Guidances for TENORM -- Other Issues in Risk Assessment and Guidance Development -- POLICY-BASED DIFFERENCES IN GUIDANCES FOR TENORM -- Limit on Acceptable Dose -- Application of the Environmental Protection Agency's Groundwater-Protection Strategy to TENORM -- Differences Between Nuclear Regulatory Commission and Environmental Protection Agency Approaches to... -- Differences in Guidances for Indoor Radon -- Difference Between Environmental Protection Agency and National Council on Radiation Protection and... -- Treatment of Natural Background in Establishing Guidances -- IMPLICATIONS OF GUIDANCES FOR RISK ASSESSMENT -- 12 Conclusions and Recommendations -- CENTRAL CONCLUSIONS AND RECOMMENDATIONS OF THE COMMITTEE -- CONTEXT FOR REGULATION OF TENORM.
RISK ASSESSMENT ISSUES UNDERLYING TENORM REGULATION -- RISK-MANAGEMENT ISSUES UNDERLYING TENORM GUIDELINES -- COMPARABILITY OF GUIDANCES AND REGULATIONS POTENTIALLY

RELATED TO TENORM -- ISSUES RELATED TO BACKGROUND RADIATION -- REFERENCES -- Appendix -- RADIATION QUANTITIES AND UNITS DEFINITIONS ACRONYMS -- DEFINITIONS -- LIST OF ACRONYMS -- Information on Committee Members.

Sommario/riassunto

Naturally occurring radionuclides are found throughout the earth's crust, and they form part of the natural background of radiation to which all humans are exposed. Many human activities-such as mining and milling of ores, extraction of petroleum products, use of groundwater for domestic purposes, and living in houses-alter the natural background of radiation either by moving naturally occurring radionuclides from inaccessible locations to locations where humans are present or by concentrating the radionuclides in the exposure environment. Such alterations of the natural environment can increase, sometimes substantially, radiation exposures of the public. Exposures of the public to naturally occurring radioactive materials (NORM) that result from human activities that alter the natural environment can be subjected to regulatory control, at least to some degree. The regulation of public exposures to such technologically enhanced naturally occurring radioactive materials (TENORM) by the US Environmental Protection Agency (EPA) and other regulatory and advisory organizations is the subject of this study by the National Research Council's Committee on the Evaluation of EPA Guidelines for Exposures to Naturally Occurring Radioactive Materials.