ISO 19461-2:2022-06 (E)

Radiological protection - Measurement for the clearance of waste contaminated with radioisotopes for medical application - Part 2: Management of solid radioactive wa ste in nuclear medicine facilities

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Fundamentals 5
4.1 Characteristics of radionuclides used in nuclear medicine facilities 5
4.1.1 General 5
4.1.2 Diagnosis and patient monitoring 5
4.1.3 Therapy 7
4.1.4 Sealed sources 7
4.2 Classification and characteristics of solid radioactive waste 8
4.2.1 Introduction 8
4.2.2 Associated non-radiological hazards 8
4.2.3 Categories of radioactive waste 8

5 General recommendations 9
5.1 General scheme of radioactive waste management 9
5.2 Segregation and collection 10
5.2.1 General recommendations 10
5.2.2 Waste package and shielding 10
5.2.3 Recommendations by waste category 10
5.3 Packaging and labelling 11
5.3.1 General recommendations 11
5.3.2 Specific recommendations for certain waste categories 12
5.4 Radioactivity survey 12
5.4.1 General recommendations 12
5.4.2 Activity measurement 13
5.4.3 Activity estimate 13
5.4.4 Dose rate measurement 13
5.5 Storage 13
5.5.1 General recommendations 13
5.5.2 Specific recommendations for certain waste categories 14
5.5.3 Storage area 14
5.6 Disposal and discharge 15
5.6.1 General recommendations 15
5.6.2 Clearance levels 15
5.6.3 Specific recommendations for certain waste categories 15
5.7 Transportation 16
5.7.1 General recommendations 16
5.7.2 On-site transfer 16
5.7.3 Off-site transfer 16

6 Radioactive waste management program and quality assurance 16

6.1 Waste management program 16
6.2 Training of personnel 17
6.3 Waste traceability - Reporting of results and record keeping 17
6.4 Quality assurance and control 17

Annex A (informative) Example of data for waste traceability 19

Bibliography 21