ISO 11665-11:2016-04 (E)

Measurement of radioactivity in the environment - Air: radon-222 - Part 11: Test method for soil gas with sampling at depth

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms,definitionsandsymbols 2
3.1 Terms and definitions 2
3.2 Symbols 2

4 Principle 3

5 Equipment 3

6 Sampling 4
6.1 Sampling objective 4
6.2 Sampling characteristics 4
6.3 Sampling conditions 4
6.3.1 General 4
6.3.2 Location of sampling place 5
6.3.3 Sampling duration 5
6.3.4 Volume of air sampled 5
6.3.5 Minimal depth of sampling 5

7 Detection 6

8 Measurement 6
8.1 Procedure 6
8.2 Influence quantities 6
8.3 Calibration 7

9 Expression of results 7
9.1 Radon activity concentration 7
9.2 Standard uncertainty 7
9.3 Decision threshold and detection limit 7
9.4 Limits of the confidence interval 8

10 Test report 8

Annex A (informative)Valuesofsoil-gasvolumesavailableforextraction 10

Annex B (normative) Measurement method using an active sampling 11

Annex C (normative) Measurement method using a passive sampling 18

Annex D (informative)Examplesofsoil-gassamplingprobesforactivesampling 21

Bibliography 24