



Public Health  
England

## Radon Potential Assessment

*(SAMPLE DOCUMENT FOR PORTFOLIOS WHERE SOME PROPERTIES  
HAVE GROUND FLOOR FOOTPRINTS GREATER THAN 25 METRES IN ANY  
DIRECTION)*

**Customer:**            *Customer Contact Name*  
                              *Property Department*  
                              *Customer Company Name*  
                              *Company Address*

**Order Reference:**    *Customer Reference*

**PHE Reference:**     *Our Reference*

**Date:**                 *26 February 2014*

This document summarises the outcome of the radon potential assessment commissioned by the customer and supports the spreadsheet of results sent by email on the date above. The results reported show the highest radon potential for premises sharing the postcodes provided by the customer. The report includes advice based on whether or not the radon potential is 1% or more and therefore classed as a radon Affected Area. As the customer property list is believed to include some large premises, advice is also given based on proximity to the nearest Affected Area.

Commercial in confidence

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## ASSESSMENT METHOD AND OUTCOMES

### England, Wales and Scotland

The definitive radon data sets for England<sup>(1)</sup>, Wales<sup>(1)</sup> and Scotland<sup>(2)</sup> allocate a radon potential to every 25m x 25m square. Searches are based on the Ordnance Survey/Royal Mail Address-Point<sup>®</sup> file of postal addresses which gives a grid reference for the delivery point allocated to each registered address.

Address specific searches are possible but are not a practical approach for large property portfolios. For this reason the advice from Public Health England (PHE) will be based on the maximum radon potential for the postcode.

This indicative search is based on postcodes supplied by the customer. Summary postcode data is used to identify the maximum radon potential for any delivery point within the area covered by the postcode. As a postcode may include the delivery points of just one or many properties, the size and shape of the area covered will vary, but in the majority of cases will be considerably less than 1 sq km.

In the case of large premises with any ground floor dimension greater than 25 metres in any direction, it is possible for the site to extend beyond the area created by the grouping of delivery points. However, as part of this assessment it is possible to increase the search radius and flag addresses with Affected Areas within a pre-determined distance as agreed with the customer.

The validity of postcodes supplied by the customer is not routinely checked as part of the assessment and if they match with an entry on the Address-Point<sup>®</sup> listing, they are deemed to be correct for the address supplied.

#### Outcomes where all premise footprints are no more than 25 metres in any direction

- The postcode includes delivery points in Affected Areas
- The postcode does not contain any delivery points in Affected Areas
- The postcode supplied does not match with the Royal Mail listing

#### Outcomes for portfolios containing larger buildings with footprints greater than 25 metres in any direction

- The postcode includes delivery points in Affected Areas
- The postcode contains no delivery points in Affected Areas and there are no Affected Areas nearby\*.
- The post code contains no delivery points in Affected Areas but there are Affected Areas nearby\*
- The postcode supplied does not match with the Royal Mail listing

\*The distance that constitutes 'nearby' will depend on the likely size of the customer's sites as discussed with them and detailed in the report

## **Northern Ireland**

The current definitive radon Affected Areas map for Northern Ireland<sup>(3)</sup> defines radon Affected Areas by 1 kilometre square areas based on the Irish grid. For assessments on large property portfolios, the radon potential is based on the 1 sq km containing the grid reference of the centre point for the postcode area as provided by the Royal Mail.

### Outcomes

As for the England, Wales and Scotland outcomes except that the search is based on the single grid reference of the centre point of the post code area as supplied by the Royal Mail.

## RESULTS AND RECOMMENDATIONS

A list of 545 addresses was supplied by the customer on which the postcode indicative assessment was requested.

As some of the sites are potentially larger than the 25 metre buffer, a distance of 100 metres has been used to determine if there are Affected Areas nearby. If any of the sites are larger than 100 metres in any direction, PHE should be told so that the search parameter can be extended.

A summary of the outcomes reported in the accompanying spreadsheet is given in Table 1. For this type of assessment the standard advice is based on the worst case radon potential for the postcode and the supplementary information entered in the 'status' and 'comment' fields of each record in the spreadsheet.

**Table 1 –Summary of results from the indicative postcode assessment**

Outcome		Number of sites	Standard PHE advice/Comment
England Wales Scotland	Postcode radon potential maximum is 1% or more	105	Radon testing should be arranged
	Postcode radon potential maximum is less than 1% and there are no Affected Areas within 100 m	398	Radon testing is only needed in any routinely occupied basements
	Postcode radon potential maximum less than 1% but the distance to the nearest Affected Area is less than «Buffer_distance» m	37	Assess the size of the site against the distance given to nearest Affected Area. Also check basement occupancy as above
Northern Ireland	1 sq km radon potential is 1% or more	0	Radon testing should be arranged
	1 sq km radon potential is less than <1%	3	Radon testing is only needed in any routinely occupied basements
Postcode not found in Address-Point®		2	Identified in the 'comments' field of the spreadsheet. Correct postcode required
Non-UK addresses		0	Not covered by PHE radon mapping
Total		545	

Originally 24 postcodes did not match with the Royal Mail/Ordnance Survey Address-Point® file. These have entries in the 'comments' field of the spreadsheet. PHE has located 22 alternatives for use in the assessment. The altered postcodes must be checked by the customer to ensure that the alternative is correct for the address. If not, the correct postcode should be re-submitted to PHE for assessment in addition to any remaining unmatched properties where the correct postcode can be found.

The postcodes that matched with the Address-Point® file were deemed to be correct for the address supplied and PHE will not accept responsibility for misinformation in the report that arises from incorrect postcodes in the customer's property list.

The advice given in the spreadsheet and summary is intended as a guide. In addition to verifying the postcodes, the customer should use the results, together with knowledge of the sites as regards basements and occupancy, to determine which ones should be tested in order to complete the risk assessment.

Queries regarding the content of this summary report and the spreadsheet should be directed to:

Jane Smithard (Radon Services Team Leader)

01235 825376  
jane.smithard@phe.gov.uk

### Radon Data Sources

1. Radon Joint Data Set for England and Wales. Health Protection Agency<sup>#</sup> and British Geological Survey. November 2007.
2. Radon Joint Data Set for Scotland. Health Protection Agency<sup>#</sup> and British Geological Survey. July 2011
3. Radon in Dwellings in Northern Ireland: 2009 Review and Atlas, November 2009

<sup>#</sup> The functions of the Health Protection Agency and HPA's intellectual rights in the Radon Joint Data Set transferred to Public Health England on 1<sup>st</sup> April 2013

Radon Group  
Centre for Radiation, Chemical and Environmental Hazards  
Public Health England  
Chilton, Didcot  
Oxfordshire OX11 0RQ

[www.UKradon.org](http://www.UKradon.org)  
[radon@phe.gov.uk](mailto:radon@phe.gov.uk)