

APPENDIX F

Radon Risk Report

Radon Risk Report for addresses in England and Wales

Issued by Public Health England and the British Geological Survey using Address-Point®. Fee paid £3.00 + VAT.
Email receipt issued by Secure Trading Ltd.

Address searched: Fred Aldous Ltd, Dale Road, Peak Dale, Buxton, SK17 8BR

Numerical grid reference for this address:

409108 East

376855 North

Date of report: 31 August 2013

Guidance for existing properties

Is this property in a radon Affected Area? - YES

The answer to the standard enquiry on house purchase known as CON29 Standard Enquiry of Local Authority;
3.13 Radon Gas: Location of the Property in a Radon Affected Area is:

Yes, this property is in a Radon Affected Area as defined by Public Health England.

The estimated probability of the property being above the Action Level for radon is: 10-30%

The result may not be valid for buildings larger than 25 metres.

This report informs you of the estimated probability that this particular property is above the Action Level for radon. This does not necessarily mean there is a radon problem in the property; the only way to find out whether it is above or below the Action Level is to carry out a radon measurement in an existing property.

Radon Affected Areas are designated by the Public Health England. PHE advises that radon gas should be measured in all properties within Radon Affected Areas.

If you are buying a currently occupied property in a Radon Affected Area, you should ask the present owner whether radon levels have been measured in the property. If they have, ask whether the results were above the Radon Action Level and if so, whether remedial measures were installed, radon levels were re-tested, and the results of re-testing confirmed the effectiveness of the measures.

Further information is available from PHE or www.ukradon.org.

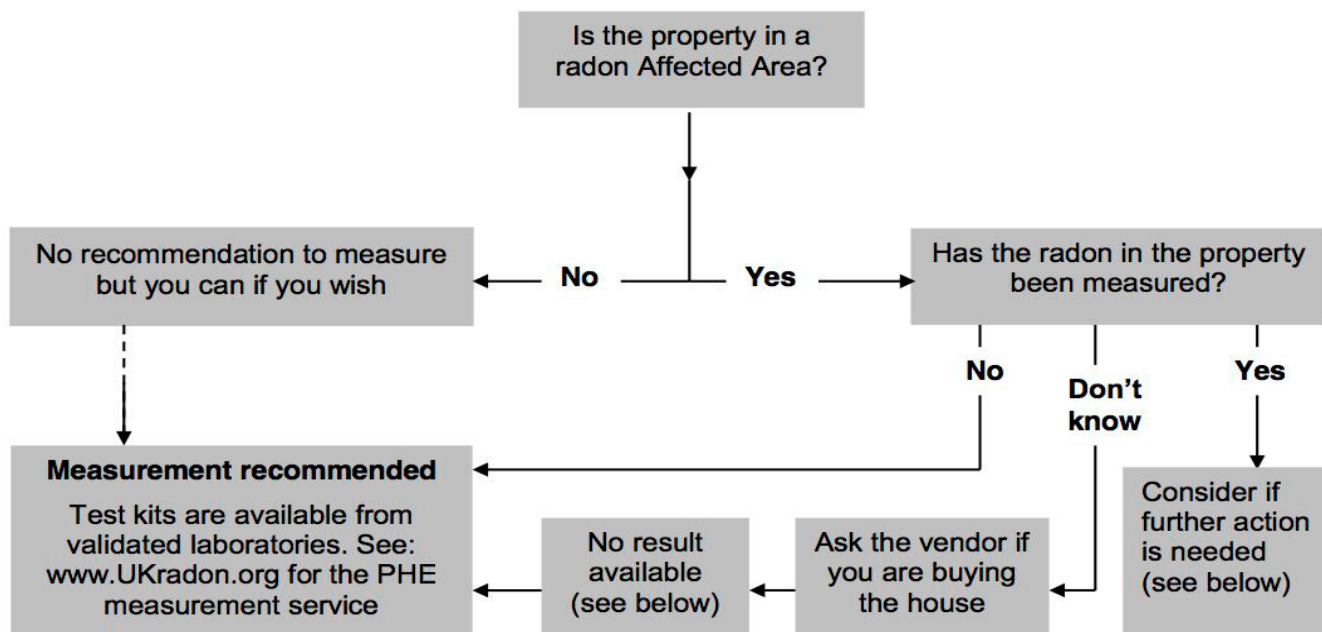
Guidance for new buildings and extensions to existing properties

What is the requirement under Building Regulations for radon protection in new buildings and extensions at the property location? - Full Protection

If you are buying a new property in a Radon Affected Area, you should ask the builder whether radon protective measures were incorporated in the construction of the property.

See the Radon and Building Regulations for more details.

PHE guidance for occupiers and prospective purchases



Existing radon test results: There is no public record of individual radon measurements. Results of previous tests can only be obtained from the seller. Radon levels can be significantly affected by changes to the building or its use, particularly by alterations to the heating and ventilation which can also be affected by changes in occupier. If in doubt, test again for reassurance.

Radon Bond: This is simply a retained fund, the terms of which are negotiated between the purchaser and the vendor. It allows the conveyance of the property to proceed without undue delay. The purchaser is protected against the possible cost of radon reduction work and the seller does not lose sale proceeds if the result is low. Make sure the agreement allows enough time to complete the test, get the result and arrange the work if needed.

High Results: Exposure to high levels of radon increases the risk of developing lung cancer. If a test in a home gives a result at or above the Action Level of 200 Becquerels per cubic metre of air (Bq/m³), formal advice will be given to lower the level. Radon reduction will also be recommended if the occupants include smokers or ex-smokers when the radon level is at or above the Target Level of 100 Bq/m³; these groups have a higher risk. Information on health risks and radon reduction work is available from PHE. Guidance about radon reduction work is also available from some Local Authorities, the Building Research Establishment and specialist contractors.

PHE designated radon website:

<http://www.ukradon.org>

Building Research Establishment:

<http://www.bre.co.uk/radon/reduce.html>

APPENDIX G

Water Quality Test Results

SUMMARY OF SEDIMENT RESULTS (SAMPLED ON 10 SEPTEMBER 2009)

Parameter	Sample ID				
	Main Lake	Small lake	Mean	Reference site 1	Reference site 2
Arsenic (mg/kg)	11.4	5.7	8.6	nd	72.6
Cadmium (mg/kg)	3.53	2.94	3.24	< 0.1	35.4
Chromium (mg/kg)	40.2	22.1	31.2	nd	771
Copper (mg/kg)	45	20.6	32.8	16.0	612
Lead (mg/kg)	183.7	42.2	113.0	59.4	2357
Mercury (mg/kg)	0.23	0.11	0.17	< 2.00	6.80
Nickel (mg/kg)	56.9	35.4	46.2	15.1	96.6
Selenium (mg/kg)	1.1	0.9	1.0	nd	9.2
Zinc (mg/kg)	250.1	146	198.1	62.7	2381

nd Not determined

< "Less than...", i.e. lower than the limit of detection

Reference site 1 is an English lowland lake formed by diverting a natural stream. It may receive some surface run off from a motorway but receives no industrial effluents. Reference site 2 is a polluted industrial site.

A literature search indicates that there are currently no formally-adopted or legislative UK standards for the presence of pollutants in sediments. The Centre for Environment, Fisheries and Aquaculture Science (CEFAS) use threshold levels to decide whether to grant permission to dump contaminated sediments at sea, while the Canadian authorities use a series of values at which adverse effects are 1) possible and 2) probable, based on existing data as to the effects of each individual contaminant on aquatic life. The pertinent values are reproduced in the table below for reference.

Parameter	Competent authority			
	CEFAS		Canadian system	
	Action level 1 (a)	Action level 2 (b)	TEL (c)	PEL (d)
Arsenic (mg/kg)	10	25-50	7.24	41.6
Cadmium (mg/kg)	0.2	2.5	0.7	4.2
Chromium (mg/kg)	20	200	52.3	160
Copper (mg/kg)	20	200	18.7	108
Lead (mg/kg)	25	250	30.2	112
Mercury (mg/kg)	0.15	1.5	0.13	0.7
Nickel (mg/kg)	10	100	ns	ns
Selenium (mg/kg)	ns	ns	ns	ns
Zinc (mg/kg)	65	400	124	271

- a Levels above this require further investigation before permission is granted to dump at sea
- b Levels above this may not be acceptable for dumping at sea
- c Threshold Effect Level
- d Probable Effect Level
- ns None specified

SUMMARY OF WATER TEST RESULTS (CONTINUED)

Dissolved oxygen:	Only one very poor reading (sample B); remainder slightly sub-optimal.
Carbon dioxide:	Lower than expected in all samples. Required for photosynthesis but rarely considered a limiting factor.
Iron (unchelated):	Perfect values.
Iron (chelated):	Would prefer to see traces of this important plant nutrient.
pH:	One order of magnitude more alkaline than the average value for surface waters.
Ammonia:	Perfect values.
Nitrite:	Always undesirable but not present in toxic quantities.
Nitrates:	Would be preferable to see slightly higher concentrations of this important plant nutrient. Indicative of very low productivity.
Phosphates:	Important plant nutrient. Usually the limiting factor in excessive algal growth, hence absence considered a good water quality characteristic.
Chlorine:	Perfect values.
Calcium:	Surprisingly low: indicates low solubility of minerals in the substrate.
General hardness:	Surprisingly low: indicates low solubility of minerals in the substrate.
Carbonate hardness:	Surprisingly low: indicates low solubility of minerals in the substrate.



AES Europe
Aquatic Environmental Solutions

**SUMMARY OF WATER TEST RESULTS (SAMPLED ON
10 SEPTEMBER 2009)**

Parameter	Sample ID			
	Main Lake slipway	Main Lake bay	Small Lake beach	Small Lake slope
	WT09044A	WT09044B	WT09044C	WT09044D
Temperature (°C)	16.0	15.0	16.0	15.0
Dissolved oxygen as mg/l	7.0	5.0	7.0	7.0
Dissolved oxygen as %	69	49	69	78
Carbon dioxide	0.3	0.3	0.2	0.2
Iron (unchelated)	0.00	0.00	0.00	0.00
Iron (chelated)	0.00	0.00	0.00	0.00
pH	8.5	8.5	8.5	8.5
Ammonia	0.00	0.00	0.00	0.00
Nitrite	0.05	0.05	0.05	0.05
Nitrate	1.0	1.0	1.0	0.5
Phosphate	0.00	0.00	0.00	0.00
Chlorine	0.00	0.00	0.00	0.00
Calcium	20	20	20	20
General hardness	44.5	44.5	53.4	53.4
Carbonate hardness	44.5	44.5	35.6	35.6

Normal reading	Readings considered to be ideal and of no concern
Within tolerances	Readings considered to be of minor concern but within reasonable tolerances
Outside tolerances	Readings considered to be of concern and outside of reasonable tolerances
Inconclusive result	Readings showing an anomalous or inconclusive result.
	Readings not subject to classification

All values presented in terms of parts per million (ppm) except pH, which is a logarithmic scale of values representing hydrogen ion concentration ranging from 0-14, with pH7 being neutral, values <7 being acidic and values >7 being alkaline.

For information on how to interpret the results above please look at the section titled **Interpreting water quality**, which is included in section 2 of this report