

G 16 – MANAGEMENT OF RADON GAS POLICY

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1. [Introduction](#)

Radon is a naturally occurring radioactive gas that emanates from the ground particularly, but not exclusively, in areas overlying granite. Exposure to this gas can induce lung cancer. Radon will naturally disperse in the open air but can accumulate in buildings. The purpose of this policy is to ensure that risks associated with Radon gas is appropriately mitigated. It sets out the roles and responsibilities and outlines the operational arrangements for monitoring and managing radon in the workplace.

The policy sets the strategy to minimise the risk from exposure to radon and its decay products to:

- a) any persons using County Council buildings
- b) County Council employees in execution of their duties, and
- c) any persons exposed through the Council's undertakings

Public Health England recommend the level at which employers must take action

2. [Objective](#)

The objective of the policy is to implement management systems that will ensure the identification of buildings where levels of radon gas concentrations reach unacceptable levels. A risk assessment approach is required following the process of direct measurement of radon levels within a building. Where results indicate that excessive levels are in existence, a record of these must be kept on the appropriate documents, with control measures and responsibilities noted and undertaken

3. [Application](#)

This policy applies to all Directorates and Services within Lincolnshire County Council (LCC) and should be adopted in all LCC premises and buildings where employees and services users work, operate and/or receive services from.

4. Roles & Responsibilities

Chief Executive

The Chief Executive has overall responsibility for health and safety within the Council including the management of radon within LCC operations.

Directors

The Director of each Service is responsible for ensuring that this policy is implemented and managed effectively in accordance with the Corporate Health and Safety Policy.

Managers & Supervisors

Managers and supervisors at all levels are directly responsible for ensuring that they are aware of this policy and take any associated actions. They are also responsible for ensuring any control measures that have been identified, through the risk assessment process, for reducing the concentration of radon are implemented and adhered to. This accountability cannot be discharged by delegation. LCC acknowledges its responsibilities as a Radon Authority as outlined in the Ionising Radiation Regulations 1999, and as such will implement this policy through the advice and guidance from Public Health England.

LCC Corporate Property

LCC Corporate Property is responsible for:

- a) ensuring that direct monitoring of radon levels are carried out in all relevant building and premises/workplaces
- b) ensuring suitable risk assessments are undertaken following the results of the direct monitoring and identifying suitable and sufficient control measures and/or remedial work
- c) arrange for remedial works to be carried out when radon gas is found within buildings/workplaces at levels considered hazardous to health
- d) ensure regular inspection and maintenance of all engineering systems provided for maintaining radon concentrations at a safe level
- e) ensuring that an up to date register and action plan is maintained, including a record of all protective measures undertaken to reduce concentration
- f) ensuring that prior to employees moving into leased buildings, radon levels are monitored and management by the owner/landlord

VINCI facilities

- a) Ensuring that protective measures are installed during construction where necessary and/or required under the Building Regulation, and that an on-going programme of monitoring is arranged
- b) Consult the radon register held within Corporate Property prior to the installation of building refurbishment within affected properties and properties that have has radon reduction measures installed

Corporate Health & Safety Team

- a) Provide guidance and advice as required
- b) Audit employees and establishments for compliance with the radon management policy and procedures
- c) To liaise, where necessary, with Corporate Property & Public Health England on the Council's radon policy, procedures and personal exposures

Employees

Employees must ensure that they participate, as requested, in the radon measurement process and use/maintain any control measures identified as being necessary to minimise risks. They should advise their line manager of any perceived needs for training or instruction in those practices

5. Monitoring Programme

Public Health England set the recommended action levels for radon. Any properties that exceed these recommended levels are subject to the Ionising Radiation Regulations 1999.

Measurement of Radon Levels

It is the responsibility of Corporate Property to identify, maintain and implement a suitable programme of initial tests for all LCC premises or premises where LCC employees are permanently based, in radon affected areas to monitor for the presence of radon.

Premises in areas not designated as 'radon affected' will be reviewed on a regular basis as to whether direct monitoring for the presence of radon is required based on a risk assessment approach.

If any properties are identified as being at risk, monitoring systems will be put in place as per Public Health England guidance/advice.

As part of the ongoing monitoring procedure, measurement will be repeated

Where radon levels are initially found to be between 200 and 400 Bq/m³ (100 to 200Bq/m³ for residences), and in areas where protective measures have been put in place to control radon concentrations, measurements will be undertaken every 3 years or as required/identified within the risk assessment.

6. Control Measures

Building Protection

New Buildings

As it is better to prevent radon from entering a building than to try to remove it once present, all the Council's new buildings in radon affected areas and those areas where the Building Research Establishment recommend basic radon measures should be considered will be

designed and built with basic radon prevention measures in place. Consideration will be given to introducing basic radon prevention measures in all the Council's new buildings.

Existing Buildings

Where an existing building has been shown, through monitoring, to have a radon level above the recognised action level remedial measures will be considered and implemented as soon as is reasonably practicable. Any such measures will be appropriate to the levels of radon detected, the type of building affected and the occupancy rates.

Following the introduction of remedial measures the premises will be monitored as detailed in Remedial Works (Below)

In certain circumstances access restrictions may be introduced on a temporary basis until it is shown that radon levels have been reduced to an acceptable level.

Remedial Works

Remedial work will be undertaken at any place of work where the radon concentration exceeds the action levels recommended by Public Health England. After remedial measures have been installed to reduce the level of radon in a premise the radon level will be immediately monitored to show that such measures are functioning correctly and effectively

Premises where remedial measures are in place to reduce the level of radon will be monitored on a regular basis to ensure that such measures remain effective.

Access Control

Where satisfactory reduction cannot be achieved the premises shall be subject to access controls to limit any levels of exposure. A risk assessment will be undertaken based on information and guidance from Public Health England to identify the safe access/expose time (hours and minutes) per week individuals will be allowed access to these areas. Detailed records of the amount of time individuals spent within these areas must be kept up to date to ensure time limits are not exceeded.

7. Maintenance of Records

Central database

A central records database for all radon information will be maintained by Corporate Property. These will be a combination of electronic and paper records until such time that all the information can be transferred to the Council's Asset Management Database. These records will include:

- Results of all monitoring
- Location of detectors
- Remedial works undertaken
- Risk assessments
- Areas of controlled access

These records are to be held for 50 years from the date of production.

On Site

Corporate Property to keep a copy of the results of any monitoring carried out.

Radon risk assessments for a premise should be retained on site.

Where mechanical ventilation is installed to reduce radon levels Strategic Asset Management to keep a record of any checks carried out to ensure the ventilation is operating.

Where access restrictions are in operation to control personal exposure to radon, such persons are required to fill in a personal exposure record form, these forms should be retained.

8. Use of Contractors

All contractors working on LCC buildings must go through the Council's procurement contractor selection and vetting procedures.

Any contractor instructed to carry out radon remedial work must be familiar with the principals of such work and, dependant upon the type and amount of work involved, comply with the Council's policies on:-

- Entry into the Council's premises
- Asbestos
- Fire/Hot Work
- Confined spaces
- Radon
- Emergency Procedures

9. Training

Corporate Property to ensure that they have an overall understanding of radon risk assessment

10. Policy Review

Regular Review

The radon policy will be reviewed on a regular basis by Corporate Health & Safety and Corporate Property. Any changes to the policy that result from the review will be authorised by the Corporate Risk & Safety Steering Group.

Review as a result of legislative changes

It is the responsibility of the Safety, Health and Environment Manager to ensure that legislative changes relating to radon are monitored and any necessary actions, including amending the policy, are implemented.

Review as a result of incidents, complaints or corrective action

It is the responsibility of Corporate Health & Safety and Corporate Property to monitor and act upon incidents, complaints and any corrective action taken relating to the management of radon that will have an impact upon the effectiveness of the radon policy.

Any changes to the policy that result from the review will be authorised by the Corporate Risk & Safety Steering Group.

11. Reference & Further guidance

Health and Safety Executive (HSE)

- HSE home page - <http://www.hse.gov.uk>
- HSE Radon in the workplace – <http://www.hse.gov.uk/radiation/ionising/radon.htm>

Health Protection Agency (HPA)

- HPA home page - <http://www.hpa.org.uk/>
- HPA radon page - <http://www.hpa.org.uk/Topics/Radiation/UnderstandingRadiation/UnderstandingRadiationTopics/Radon/>

Building Research Establishment (BRE)

- BRE home page - <http://www.bre.co.uk/>
- BRE radon page - <http://www.bre.co.uk/radon/>

The Radon Council

- Radon Council home page - <http://www.radoncouncil.org/>

World Health Organisation (WHO)

- WHO Radon & Cancer - <http://www.who.int/mediacentre/factsheets/fs291/en/>

Public Health England (PHE)

- UK radon information – <http://www.ukradon.org/>