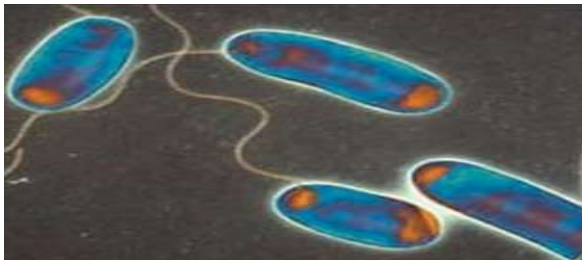


**North Kesteven District Council
Corporate Health and Safety Policy**

Water Hygiene & Control of Legionnaires Disease Policy

Version 6 July 2017



Water Hygiene and the Control of Legionella Policy Policy Statement

North Kesteven District Council firmly believes that the health, safety and wellbeing of all those who may be affected by its activities is of paramount importance.

The Council, through its Corporate Management Team, Heads of Service, Unit Managers and Elected Members, in consultation with the Unions will ensure that its activities in relation to Water Hygiene and the Control of Legionella Policy are conducted in a manner which identifies and controls foreseeable risks in accordance with current legislation, recognised guidance and best practice.

In order to achieve excellence in Water Hygiene and the Control of Legionella the Council has the following objectives;

- To provide sufficient resources necessary to establish, maintain and develop comprehensive health and safety practices, competencies, and safe places of work including safe equipment and safe methods in relation to Water Hygiene and the Control of Legionella.
- To ensure when adopting this policy hazards are identified and the associated risks assessed, managed in a sensible way and reviewed as necessary, providing those affected with appropriate information, training, instruction or supervision.
- To comply with the requirements of current health and safety legislation and implement procedures to ensure a safe and healthy working environment with commitment to the prevention of injury and ill health.
- To maintain appropriate health and safety management systems and arrangements and to annually review the effectiveness of these arrangements striving for continuous improvement.

North Kesteven District Council, its Directors and Elected Members give full backing to this policy and support all those who take action to implement it.

Ian Fytche
Chief Executive
Date

Signed Cllr Richard Wright
Leader of the Council
Date

Signed NAME
GMB Union Representative
Date

Signed NAME
Unison Representative
Date

**North Kesteven District Council
POLICY FOR WATER HYGIENE & THE CONTROL OF LEGIONNAIRES DISEASE**

Date of Implementation	November 2014	Policy Owner	Scott Masterman
Date for Review	November 2015 Complete October 2016 Complete October 2017 Complete June 2017 Complete	Policy Reference	HS 150

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1.0 Introduction

What is Legionella?

Legionella bacteria are common and can be found naturally in many environmental water sources, usually in low numbers. Water temperatures in the range of 20oc to 45oc favour growth. Legionella bacteria require a supply of nutrients such as algae, sediment, sludge, scale etc to grow.

As Legionella bacteria are commonly encountered in environmental water sources they may eventually colonise poorly maintained and vulnerable water systems such as cooling tower systems, hot and cold water systems and other plant which use or store water. When colonisation occurs in significant numbers within a system capable of producing a water mist, spray or droplets, (e.g., humidifiers, spa baths, cooling towers and shower systems etc.) the bacteria can become airborne and be subsequently inhaled by an individual.

Consequences of Contamination

Following respiration of the bacteria the host may develop a range of symptoms similar to flu – chills, fever, and diarrhea. Although there are several different strains of the bacteria some which manifest in mild symptoms, there are a few strains which can develop into serious and life threatening conditions such as pneumonia.

Those working with water systems need to be aware of the risks associated with Legionella contamination so that a system of Water Management and Control can be adopted that does not place themselves or others at risk.

Particular threat has been identified with persons in the following groups:

- The elderly
- The immune compromised
- Alcoholics / Drug users
- People who frequently travel out of the UK – Hotels
- Those working to maintain water systems
- Males over 45, particularly with existing lung damage or smokers

2.0 Definitions

Non-Domestic Premises

Non domestic premises are premises which are used as a place of work, visitor venues, premises which provide support or service facilities for members of the public, communal areas of sheltered schemes and any other council owned and managed premises where

responsibility for water hygiene has not been specifically devolved as a Council responsibility through a lease contract or other agreement.

Domestic Premises

Domestic Premises are places of residence and include the Councils housing stock.

Hot and Cold Water Systems

Whilst the policy applies to the management of all hot and cold water systems and it also relates to other "at risk" systems including, for example: -

- Cooling towers and evaporative condensers.
- Showers and spray taps
- Humidifiers and air washers.
- Spa baths and pools where the water is deliberately agitated.
- Other plant and systems containing water likely to exceed 20°C that can release a spray or aerosol.

Therefore where the term "hot and cold water system" is used it should be read as including the above definitions.

Legionnaires Disease Management Plan

The Legionnaires Disease Management Plan is the agreed documented plan which identifies how the Council will manage its risks associated with legionella bacteria. North Kesteven's Legionnaires Disease Management Plan can be found on page 20 of this policy.

Water Hygiene Log Book

The Water Hygiene Log Book is a record of the tests, measurements or inspections conducted which have been identified as necessary by the premises risk assessment and Legionnaires Disease Management Plan. The Log Book will contain details/frequency of the necessary water hygiene tasks that must be completed by the building manager or other appointed person at the site.

3.0 Scope

Premises falling under the scope of this policy are all NKDC owned or managed properties including those which NKDC manages on behalf of Lafford Homes Ltd.

Non-Domestic Premises

This policy will apply to all non-domestic premises that are directly managed by the Council.

Property name and address	Building Manager or Responsible Person	Contact details
North Kesteven District Council Offices	Stephen Evans stephen_evans@n-kesteven.gov.uk	01529 414155 01529 308212 07717156454
Billinghay Parish Office, The Old Vicarage, Billinghay	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Ringmoor House, Billinghay,	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
The Whyche Communal Room, Billinghay	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Communal Room, 1 Linden Court, Bracebridge Heath	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Communal Room, Clarke Avenue, Heighington	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Thomas Garrett Heritage Room, Heighington	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Communal Room, Caroline Road, Metherringham	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Infolinks Metherringham	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Refuse Depot, Metherringham	Nina Camm nina_camm@n-kesteven.gov.uk	01529 414155 01529 308151

		07793 431352
Moneys Yard Toilets, Sleaford	Nina Camm nina_camm@n-kesteven.gov.uk	01529 414155 01529 308151 07793 431352
Market Office, Market Place, Sleaford	Nina Camm nina_camm@n-kesteven.gov.uk	01529 414155 01529 308151 07793 431352
Mrs. Smith's Cottage, Navenby	Alan Gray alan_gray@n-kesteven.gov.uk	01529 414155 01529 308170 07816 294701
Office, 4 North Lane, Navenby	Alan Gray alan_gray@n-kesteven.gov.uk	01529 414155 01529 308170 07816 294701
Communal Room, Grinter House, North Hykeham	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Communal Room, Edinburgh Road, Ruskington	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Communal Room, Kesteven Court, North Hykeham	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Communal Room, Pinfold Way Ruskington	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Communal Room, 15 Greenfield Road, Sleaford	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Communal Road Elsaforde Gardens Sleaford	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Communal Room, Millers Road, Waddington	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226

		07770 8365511
Communal Room 22 Manor Close, Welbourn	Mervyn Baldry mervyn_baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Cranwell Aviation Centre North Rauceby	Alan Gray alan_gray@n-kesteven.gov.uk	01529 414155 01529 308170 07816 294701
Cogglesford Mill, Sleaford	Alan Gray alan_gray@n-kesteven.gov.uk	01529 414155 01529 308170 07816 294701
Flats Northgate Sleaford (inc Pumphouse)	Michael Gadd michael_gadd@n-kesteven.gov.uk	01529 414155 01529 308011 07733 315747
Pump House St Giles, Sleaford	Michael Gadd michael_gadd@n-kesteven.gov.uk	01529 414155 01529 308011 07733 315747
Heritage Room and Post Office North Scarle	Michael Gadd michael_gadd@n-kesteven.gov.uk	01529 414155 01529 308011 07733 315747
Communal Room, Willow Close, Heckington	Mervyn Baldry mervyn_Baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511
Welbourn Forge, Welbourn	Mervyn Baldry mervyn_Baldry@n-kesteven.gov.uk	01529 414155 01529 308226 07770 8365511

Leisure Partnerships

Leisure Partnerships are responsible for implementing L8 within the premises they manage on behalf of the Council:

- Sleaford Leisure Centre, Sleaford
- North Kesteven Leisure Centre, North Hykeham
- The National Centre For Craft and Design, Sleaford
- Whisby Natural World, Whisby
- Northgate Sports Hall, Sleaford
- Station Sports Centre, Harpers, Sleaford

Council Owned Workshops

The Council owns the following workshops which are leased out to private commercial tenants:

- St Johns Hospital; Industrial Units at Bracebridge Heath
- The Moorlands Trading Estate, Metheringham
- Blackwood Court Teal Park North Hykeham
- Navigation Yard Business Units, Sleaford

Council Leased Workshops

The Council leases the following workshops which are then sub leased out to private commercial tenants:

- Billingham Industrial Units
- Aubourn Industrial Units
- Seven-0-Seven and Severn Churchill Business Units, Bracebridge Heath
- Reed Spire Industrial Units
- Sleaford Business Centre

Council Owned Property (managed by others)

The Council owns the following sites which are leased out to others who are responsible for implementing L8 within the premises they lease:

- CAB premises, managed by Debra Cressey, manager@sleafordcab.cabnet.org.uk
08444111444

Water Hygiene and Legionella Management – Tenants Responsibilities

Tenants of the units listed below are required to comply fully with the requirements of HSE publication L8 and with all current health and safety legislation to ensure Legionella risks which arise out of their activities are effectively managed.

- Seven-0-Seven and Severn Churchill Business Units, Bracebridge Heath
- Reed Spire Industrial Units
- The Moorlands Industrial Units
- Billingham Industrial Units
- Aubourn Industrial Units

- St John's Hospital; Industrial Units at Bracebridge Heath
- Sleaford Business Centre
- Blackwood Court Teal Park North Hykeham
- Navigation Yard Business Units

The Council will not conduct testing on behalf of tenants unless a specific written agreement exists.

It will be the responsibility of each tenant to ensure they have suitable arrangements in place to carry out their responsibilities under current legislation.

Water Hygiene and Legionella Management – Letting Agents and North Kesteven District Council Responsibilities

The following workshops are covered by the water hygiene and Legionella management procedures for which the Councils Agents (Lambert Smith Hampton) are responsible for managing.

- Aurbourn Industrial Units (communal parts)
- St John Hospital Industrial Units (communal parts)
- Billingham Industrial Units (water feed)

Lambert Smith Hampton is responsible for appointing a competent contractor to conduct water hygiene testing and management in accordance with HSE guidance L8 on the parts of the water systems listed above.

Lambert Smith Hampton are responsible for addressing all non-conformances reported to them by the competent contractor and they ensure actions necessary to rectify are implemented on behalf of the Council.

Tenants Responsibilities

Tenants of all industrial units are required to comply fully with the requirements of HSE publication L8 and with all current health and safety legislation to ensure Legionella risks which arise out of their activities are effectively managed.

The Council accepts no responsibilities for testing or water management arising out of tenants own activities.

Domestic Premises

The legionnaires risk associated with Domestic premises has been evaluated with the Councils Housing Stock and actions required in the following circumstances:

- Where properties are in the Councils control i.e. voids or properties empty for refurbishment. The voids process is to be followed to drain down or flush the system.
- Where properties are having capital works which affect the water system and tenants remain in occupation. The system should be drained down or flushed by the contractor.
- Where tenants of sheltered schemes with combined water systems are away from their property for periods of over one week. A leaflet has been provided to tenants to make them aware of their responsibilities.

Domestic Risk assessment

Part 2: The control of legionella bacteria in hot and cold water systems requires the following: -

“2.146 It may be impractical to risk assess every individual residential unit, eg where there are a significant number of units under the control of the landlord, such as Housing Associations or Councils. In such cases, a representative proportion of the premises for which they have responsibility should initially be assessed, on the basis of similar design, size, age and water supply, with the entire estate eventually assessed on a rolling programme of work”.

A rolling programme of risk assessment will commence from June 2016 and the information will be used to populate a cloned Domestic risk assessment property types schedule.

Risks associated with domestic properties has been identified and circulated to all residents occupying properties through the Councils At Home magazine and in the tenants handbook when the tenant take occupation of the property.

4.0 Legislation

Health and Safety legislation and specific Approved Code of Practice (ACOP) L8 requires that risk assessments and schemes to prevent or manage any risk are put in place by employers to protect employees and members of the public from exposure to Legionella bacteria in the atmosphere.

Health & Safety at Work etc Act 1974 and Management of Health and Safety at Work Regulations 1999

The Health & Safety at Work etc Act 1974 extends to the risk from legionella bacteria which may arise from work activities. The Management of Health and Safety at Work Regulations provide a broad framework for controlling health and safety at work.

Control of Substances Hazardous to Health Regulations

More specifically the Control of Substances Hazardous to Health Regulations (COSHH) provide a framework of actions designed to control the risk from a range of hazardous substances including biological agents. The essential elements of COSHH are:

- risk assessments are carried out;
- steps are taken to prevent exposure where total removal of the hazardous substance is not reasonably practicable;
- maintenance, examination and testing of control measures, for example, automatic dosing equipment for delivery of biocides and other treatment chemicals;
- provision of information, instruction and training for employees;
- where appropriate, health surveillance is carried out;
- maintaining a record of Material Safety Data Sheets (MSDS).

The Notification of Cooling Towers and Evaporative Condensers Regulations 1992

Anyone who controls premises which has equipment that includes a cooling tower and/or evaporative condensers must inform the Local Authority, in writing with details of the 'notifiable devices' on the appropriate forms. There is an exception to this requirement to notify, being that their systems contain water that is not exposed to the air and the water and electricity supply are not connected.

The monitoring of the local register in North Kesteven District is the responsibility of the Environmental Health Team.

Legionnaires' disease – The Control of Legionella Bacteria in Water Systems Approved Codes of Practice (ACOP) L8 - 2013

The ACOP applies to the control of legionella bacteria in any undertaking involving work activity and to premises controlled in connection with trade or business, whose activity gives rise to a risk of harmful exposure to legionella bacteria.

These include the following:

- water systems incorporating a cooling tower;
- water systems incorporating an evaporative condenser;
- hot and cold water systems; and
- other plant and systems containing water which is likely to exceed 20°C and which may release a spray or aerosol during operation or maintenance such as vehicle washers, humidifiers and spa baths.

The ACOP provides a basic framework for preventing outbreaks of the disease, giving advice on how to comply with the requirements of the Health and Safety at Work etc. Act 1974 and Control of Substances Hazardous to Health Regulations. It places responsibility on employers and others to:

- identify and assess risks of legionellosis
- avoid the use of systems that give rise to a foreseeable risk of legionellosis or, where this is not reasonably practicable, prepare a written scheme for minimising the risk from exposure
- appoint competent persons to identify risk and produce competent written assessments
- implement and manage the scheme of precautions including the appointment of a person / persons, to take managerial responsibility and to provide supervision
- keep appropriate records.
- Ensure risks resulting from the temperature control of systems are mitigated – use and maintenance of Thermostatic Mixer Valves in appropriate locations.

Implementation

It is North Kesteven District Council's objective to ensure that, as far as reasonably practicable, no occupant of, or visitor to council controlled premises could be exposed to risk as a result of Legionella Bacteria.

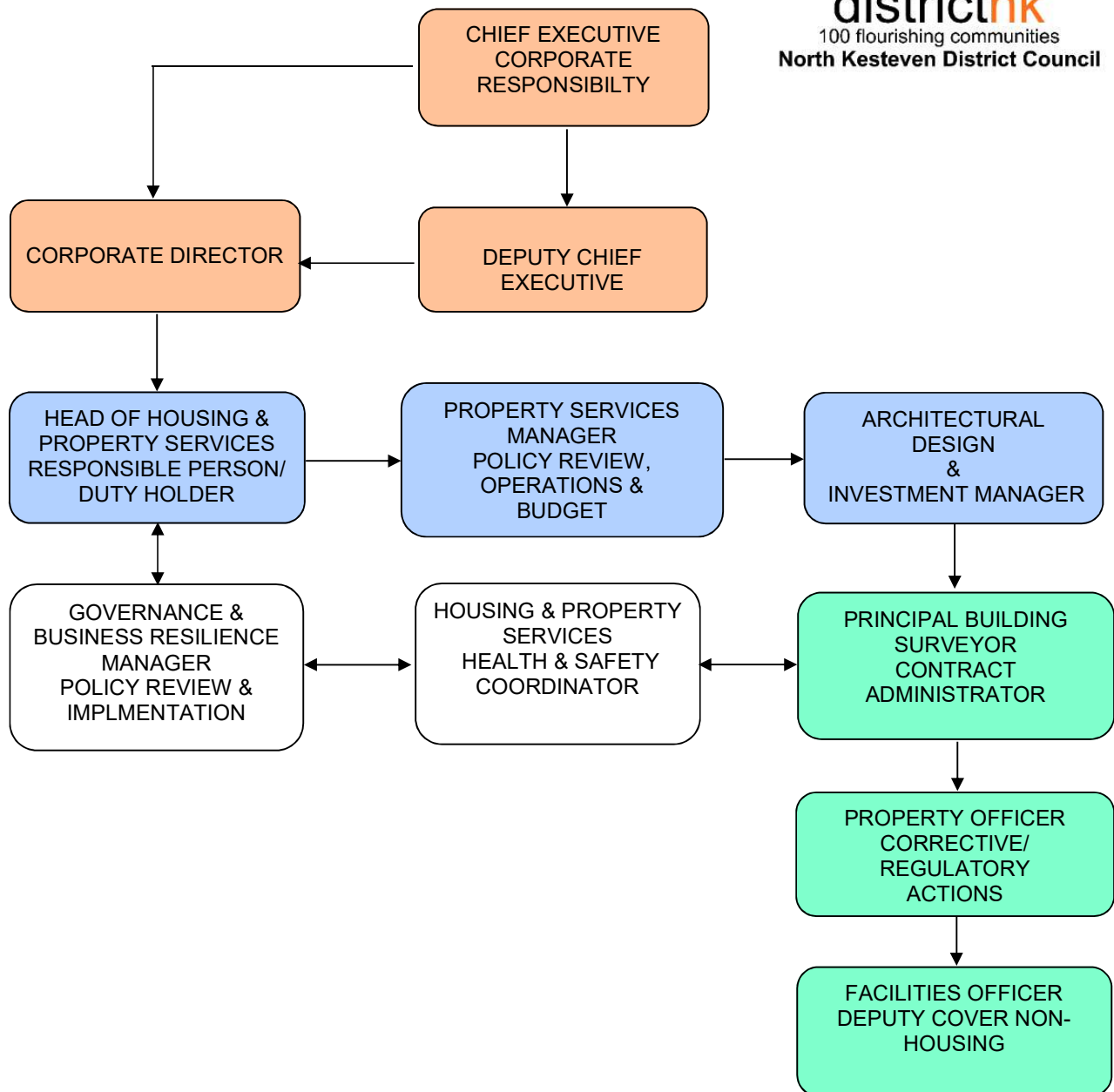
The Council recognises and accepts its obligations under current legislation including the Health and Safety at Work etc Act 1974, the Control of Substances Hazardous to Health Regulations 2002 and the HSE guidance The Control of Legionella Bacteria in Water Systems (L8) 2013.

In particular, North Kesteven District Council will:

- Appoint a competent contractor to advise on the potential areas of risk and identify where systems do not comply with legislation or guidance, and in particular to ensure all work is in accordance with HSE guidance L8.
- Appoint a competent contractor to prepare a full and detailed risk assessment covering all non-domestic premises with regard to Legionella bacteria.
- Appoint a competent contractor to prepare a full and detailed written scheme of for controlling and minimising the risk from Legionella bacteria and to ensure good water hygiene at all premises (non-domestic).
- Provide Building Managers and other relevant staff with adequate information, instruction and training in order that they may conduct the necessary local water hygiene tasks and checks.
- Ensure letting agents acting on the Councils behalf implement all of the requirements of HSE publication L8 and ensure that they have effective water hygiene and Legionnaires Disease control system.
- Ensure suitable emergency procedures are in place and that these procedures are routinely tested for effectiveness.
- Promote awareness of the hazards of Legionella bacteria and poor water hygiene and the Council's management procedures to all staff within the Council through development of this policy, induction and periodic training as appropriate to their job.

- Ensure Leisure Contractors operating on the Councils behalf implement all of the requirements of HSE publication L8 and ensure that they have effective Water Hygiene and Legionnaires Disease control system.
- Allocate sufficient resources to ensure the effective management and control of Legionella Bacteria.

5.0 Policy Organisation



Key

- CORPORATE RESPONSIBILITY
- MANAGEMENT RESPONSIBILITY
- DEPUTY RESPONSIBILITY

6.0 Policy Management Arrangements

Ultimate responsibility for this policy rests with the Council as the employer. The Council will require the Chief Executive to ensure that the policy is effectively applied. As with all matters relating to health and safety, the Directors, Heads of Service and Unit Managers have devolved responsibility for the application of the policy.

Chief Executive

The Chief Executive will have ultimate ownership of this policy and the arrangements described within. The delegation of responsibility can be made to Deputy Chief Executive or Corporate Director in the absence of the Chief either through leave or other absence.

Deputy Chief Executive/Corporate Director

The Corporate Director will take ownership of the Policy and the arrangements described within in the absence of the Chief Executive either through leave or other absence.

Head of Housing and Property Services will:

1. Lead on and manage the corporate risk assessment process for all Council managed buildings and oversee the Management Plan detailed in this policy.
2. Identify necessary resources to take remedial action to reduce the risks presented by Legionnaires' disease within the premises managed by them.
3. Ensure that all premises managers follow the steps set out in the section below.
4. Liaise with the Corporate Director, Health and Safety Officer and Property Services Manager where legionella risks are identified.
5. Accept the role of Responsible Person/Duty holder as detailed in L8.
6. Delegate responsibility to an appropriately trained and competent representative(s) from Property Services to:
 - Appoint a competent contractor to advise on areas of risk and where systems fail to meet the required standard and to carry out the requirements of HSE guidance L8
 - Advise departments and building managers on the necessary remedial action to take following water hygiene risk assessments
 - Monitor the implementation of procedures and actions in relation to compliance with L8
 - Maintain and coordinate appropriate records
 - Arrange for the necessary water hygiene risk assessment reviews
 - Arrange for the monitoring of the effectiveness of necessary remedial work following water hygiene risk assessments and testing
 - Manage the appointed contractor to undertake the risk assessment and testing of sites

Property Services Manager will:

1. Provide advice and assistance on implementation of this policy and to managers in commissioning or managing any works in connection with hot and cold water systems (and other related systems) as defined by this policy.

Principal Surveyor – (Contract Administrator) will:

1. Arrange the appointment of a competent Water Quality Risk Assessment Contractor approved by the LCA (Legionella Control Association).
2. Arrange the appointment of a competent Water Quality Management Contractor to manage Water Systems identified within this policy to ensure that they are fully compliant with the guidance contained in ACOP- the Control of Legionella Bacteria in Water Systems L8 2013.
3. Maintain a schedule of meetings with the Water Quality Management Contractor to ensure all relevant information regarding risk assessments is acted upon within a reasonable time limit.
4. Act as first point of contact during any escalation relating to:
 - Positive reading from water sampling
 - Continued loss of control of any water system under NKDC responsibility

Architectural Design & Investment Manager/ Repairs Manager / Building Responsible Managers / Those in Control of Premises will:

1. Allow reasonable access to enable the water hygiene risk assessment and any remedial works to take place.
2. Liaise with Property Services on the management of Legionnaires 'disease within their premises and the commissioning of any remedial works.
3. Ensure **no** repair, maintenance or alteration work takes place on the hot and cold water system within the building(s) they are responsible for without notifying Property Services of the planned changes so an assessment can be made as to the potential water hygiene impact on the system.
4. Nominate an individual (s) who will be responsible for completing the routine water hygiene tasks and checks for the premises, as detailed within the water hygiene site logbook (para 11).
5. Ensure that the necessary routine water hygiene tasks and checks as described in the premises Water Hygiene Log Book are completed at the required frequencies and recorded in the site logbook.
6. Report any changes in water quality to Project Co-ordination and Corporate Property
7. Advise their departments Senior Management Team where additional funding is required to comply with L8 or where risk assessments have identified potential areas of concern.
8. Implement the water hygiene checklist at Appendix 1 of this policy.

Governance and Business Resilience Manager and Housing and Property Services Health and Safety Coordinator will:

1. Provide appropriate advice and support to managers in respect to all aspects of this policy, its procedures and good practice.
2. Review the effectiveness of this policy with relevant staff from the Properties Management Team at least every two years or sooner as may be necessary.
3. Coordinate with the HR Department relevant training to ensure named persons receive adequate training in order that they may perform their roles effectively.

Those who Design or Commission Work on Hot and Cold Water Systems Must:

1. Ensure that any changes to the water system are designed and constructed to ensure that the system will be safe and without risks to health.
2. Ensure that L8 2013 The Control of Legionella Bacterium in Water Systems and the CIBSE guide TM13 2000 "Minimising the risk of Legionnaires' Disease" and other relevant standards are strictly followed.
3. Consult the water hygiene risk assessment and written schematic for the building as part of the planning process.
4. Comply with all relevant British standards.
5. Aid safe operation of the system by making water circuits as simple and short/direct as possible. "Deadlegs" will be avoided.
6. Aid cleaning and disinfection to ensure those parts of the system that require routine/regular cleaning are easily accessible.
7. Reduce stored cold/hot water to a minimum needed to meet peak demands.
8. Minimise heat gain/loss by ensuring water pipes and storage tanks are insulated and ensure hot and cold pipes are suitably separated to prevent heat transfer.
9. Update existing schematics and register any changes with Property Services.
10. Select materials which do not support bacterial or fungal growth e.g. polythene construction.
11. Lag calorifiers and hot water pipes to ensure water temperatures reach 60°C and 50°C respectively and make appropriate arrangements to prevent scalding of these using the system outlets.
12. Minimise the ingress of organic material into water storage tanks by having close fitting lids and insect screens fitted to overflow pipes.

Those who work on, or repair, hot and cold water systems (Contractors or Council Employees) must:

1. Ensure a risk assessment has been completed and that relevant health and safety precautions are in place for the work.
2. Record any changes/repairs made to the system and record them within the sites water hygiene log book. Where necessary the schematic drawing must also be updated.
3. Ensure that L8 2013 The Control of Legionella Bacterium in Water Systems and the CIBSE guide TM13 2000“Minimising the risk of Legionnaires’ Disease” and other relevant standards are strictly followed.

Water Hygiene Contractors (Risk Assessors) will:

1. Ensure all work is in accordance with the ACOP L8. The Control of Legionella Bacterium in Water Systems 2013.
2. Ensure that those engaged in the risk assessment process are suitably qualified and competent.
3. Provide a suitable method statement and general risk assessment for the work to ensure the safety of their workforce and Council staff/members of the public to Property Services for review and acceptance before work begins.
4. Programme the water hygiene risk assessments, identified by Property Services, as part of the Council’s management plan.
5. Prepare a full and detailed water hygiene risk assessment of the hot and cold water systems at various premises provided to them.
6. Prepare a specific written scheme of control for minimising the risk from legionella bacteria and to ensure good water hygiene at each of the premises risk assessed.
7. Prepare a full and detailed written schematic of the hot and cold water system at each of the premises risk assessed.
8. Provide both a written and computer-based record of the risk assessment, scheme of control and schematic of the water system.
9. Provide the building manager with a Site Water Hygiene Log Book and carry out digital thermometer test and record the water temperatures.
10. Provide the Building Manager and other relevant staff with adequate information, instruction and training to carry out the required local water hygiene tasks and checks listed in the Water Hygiene Log Book.
11. Review this Policy on an annual basis.
12. Where temperature non-conformities are identified adjust the system accordingly, retest until satisfactory temperatures are achieved and record the actions and inform the contract administrator. Where the temperature cannot be altered due to failure of the controls the contractor shall report this to the contract administrator as a non-conformity requiring client action.

All Employee's, Line managers, Managers and Supervisors will:

1. Immediately report to the Principal Surveyor any changes in the water quality within the building they work.
2. Immediately report any confirmation from a Medical Practitioner that they have been diagnosed with any form of Legionellosis.

Letting Agents action on behalf of the Council will:

1. Implement the requirements of HSE publication L8 the Control of Legionella Bacterium in Water Systems 2013 on the Councils behalf for the premises identified in the policy scope.
2. Implement effective Legionnaires Disease Management Plans (including appropriate risk assessment and written scheme of control) and manage these plans on behalf of the Council for the premises identified in the policy scope.
3. Ensure all non-conformances, risks or concerns are raised in an appropriate and timely way with the relevant Council representative.

7.0 Legionnaires' Disease Management Plan

North Kesteven District Council accepts its responsibilities as outlined in The Health and Safety Executive Approved Code of Practice & Guidance 2013 – The Control of Legionella bacteria in water systems (L8) and all associated guidance.

The Council will aim to eliminate or reduce, as far as is reasonably practicable, the risks from legionella bacteria.

In support of this the Council will:

1. Appoint a person (an authorised officer) to be managerially responsible for implementing this Management Plan and L8.
2. Provide training for all building managers and staff engaged in routine water hygiene tasks and checks.
3. Provide an appropriate level of information and training for those with responsibilities under this policy.
4. Appoint a competent Contractor who will:
 - Identify and assess sources of risk by implementing a corporate programme of water hygiene (Legionella) risk assessments of all Council managed premises (for which the Council has responsibility for with regard to legionella as covered by the scope of this policy) in order to locate and identify the conditions that encourage bacteria to multiply.
 - Prepare and maintain a written scheme for preventing and controlling the water hygiene risks presented at each of our buildings.
 - Implement, manage and monitor all precautions following a water hygiene risk assessment.

- Specify necessary routine water hygiene tasks and checks for each of our premises as appropriate.
- Commission only competent and appropriately qualified contractors to complete the water hygiene risk assessments.
- Review risk assessments in line with L8ACOP recommendations.
- Create a written schematic of the hot and cold water systems for each of the Council managed premises.
- Review the Councils Water Hygiene Policy on an annual basis.

8.0 Water Hygiene Risk Assessment

All Council managed premises covered by the scope of this policy will be subject to a water hygiene risk assessment.

Assessments will be carried out by a competent and experienced analytical company assessed by Property Services.

The assessments will be conducted in accordance with L8 and the order and timescales for assessments will be prioritised based on the risks presented.

The risk assessment will focus on eliminating the risk of Legionnaires Disease. Where risks cannot be eliminated, the risk assessment will identify the remedial actions necessary in order of priority to ensure the risk of Legionnaires Disease is minimised to an acceptable level.

A copy of the risk assessment, any review and written scheme of control will be held on site by the building manager and a copy retained by Property Services – Principal Surveyor (Contract Administrator).

Written Scheme of Control

As part of the water hygiene risk assessment a site specific written scheme of control will be established by the Risk Assessor to minimise the risks of Legionella bacteria and ensure good water hygiene for each premises.

The scheme will include:

- A detailed schematic of the hot and cold water system.
- A description of the correct and safe operation of the system.
- Precautions to be taken.
- The required routine water hygiene tasks and checks for the building to ensure the system is functioning efficiently. These will be listed within the water hygiene site logbook.
- Remedial action to be taken in the event that the scheme is shown not to be effective.

- Whether routine water testing/monitoring is required for the system e.g. legionella bacteria, other general bacterial testing, e.g. Total Viable Count (TVC) etc.

Reviewing Risk Assessments

Following completion of each building's water hygiene risk assessment the Building Manager must make arrangements to complete any remedial works in a timely manner to comply with the requirements of the risk assessment.

Testing for Legionella Bacteria and Microbiological Monitoring

On-going monitoring of general bacterial numbers Total Viable Count (TVC) of hot and cold water systems will not normally be carried out unless there are required as part of the risk assessment, or reported as necessary, or suspected, changes in the water system e.g. taste, odour, colour etc.

Testing for legionella bacteria will normally be completed (in accordance with L8) where:-

- It is identified as necessary within the water hygiene risk assessment.
- Water storage and distribution temperatures are reduced from those recommended in L8.
- An outbreak of Legionella is suspected.
- Controls of a system e.g. temperatures/biocide levels cannot be consistently achieved.
- It may be required by inspectorate bodies such as CSCI as part of any registration process.
- Analysis of water samples will only be carried out by a UKAS accredited laboratory.

Implementation of remedial action following the results of any test will be prioritised on the action levels contained within L8.

Water Temperatures

Temperature control is an effective means to ensure the risks from legionella bacteria are minimised.

Operation of the hot and cold water system should therefore be designed to restrict bacterial growth (legionella proliferates between 20°C and 45°C) by keeping;

- Calorifier temperatures above 60°C.
- Cold water temperatures (taps and storage) below 20°C.
- Hot water temperatures at taps above 50°C (after one minute). The scalding dangers presented by water above 50°C need to be seriously considered particularly. Water temperatures should be controlled not to exceed 43°C by the installation of fail-safe thermostatic mixer taps/shower as promoted by the Council

where the risk assessment dictates there is risk – Elderly or disabled users of facilities. In all cases hot water outlets will display a warning sign.

- Water softeners and filters maintained according to manufacturer's instructions.
- Older water systems that are unable to achieve required temperatures will have an alternative means of controlling growth of bacteria defined within the written scheme of control.

Conversion to Aid Understanding

All figures shown in Celsius can be converted to Fahrenheit as follows:

$$20^{\circ}\text{C} = 68^{\circ}\text{F} \quad 45^{\circ}\text{C} = 113^{\circ}\text{F}$$

$$50^{\circ}\text{C} = 122^{\circ}\text{F} \quad 60^{\circ}\text{C} = 140^{\circ}\text{F}$$

Scalding HSG274

There is a risk of scalding where the water temperature at the outlet is above 44 °C. In certain facilities with 'at risk' patients this is especially so where there is whole body immersion in baths and showers of vulnerable patients, including the very young, elderly people, and people with disabilities or those with sensory loss who may not be able to recognise high temperatures and respond quickly.

Where there are vulnerable individuals and whole body immersion, testing of outlet temperatures using a thermometer can provide additional reassurance.

The potential scalding risk should be assessed and controlled in the context of the vulnerability of those being cared for. The approach will depend on the needs and capabilities of patients or residents.

For most people, the scalding risk is minimal where water is delivered up to 50 °C at hand washbasins and using hot water signs may be considered sufficient, where a TMV is not fitted.

Where vulnerable people are identified and have access to baths or showers and the scalding risk is considered significant, TMV Type 3 (TMV3) are required. This shall be reviewed for all disabled toilets in use and communal facilities provided in housing schemes.

Water Hygiene Site Log Book

Following a risk assessment, a Water Hygiene Log Book will be provided to each building manager. The log book will contain details/frequency of the necessary water hygiene tasks that must be completed by the building manager or other appointed person at the site.

Housing Stock (Domestic Premises)

The revised Approved code of Practice 2014 states the following in relation to the Domestic Properties:

2.141 For most residential settings, the risk assessment may show the risks are low, in which case no further action may be necessary, eg housing units with small domestic-type water systems where water turnover is high. If the assessment shows the risks are insignificant and are being properly managed to comply with the law, no further action may be required, but it is important to review the assessment periodically in case anything changes in the system. However, the frequency of inspection and maintenance will depend on the system and the risks it presents.

2.142 Simple control measures can help manage the risk of exposure to legionella and should be maintained, such as: flushing out the system before letting the property; avoiding debris getting into the system (eg ensure the cold water tanks, where fitted, have a tight-fitting lid); setting control parameters (eg setting the temperature of the calorifier to ensure water is stored at 60 °C); making sure any redundant pipework identified is removed; advising tenants to regularly clean and disinfect showerheads.

2.143 Landlords should inform tenants of the potential risk of exposure to legionella and its consequences and advise on any actions arising from the findings of the risk assessment, where appropriate. Tenants should be advised to inform the landlord if the hot water is not heating properly or if there are any other problems with the system, so that appropriate action can be taken.

In order to manage the ACoP the following will be implemented:

- A rolling programme of risk assessments will be carried out and any significant findings beyond recommendation of the tenants' leaflets will be brought to the attention of the residents. A leaflet has been circulated to all residents and forms part of the Tenancy Agreement advising on the risks associated with legionella and good practice to maintain the system.
- A void process is in place to ensure systems are flushed weekly or drained down. The cold water storage and system will be inspected for dead legs as part of the re letting process and condition surveys.

Identified Risk in Council Housing Stock

- Where properties are in the Councils control i.e. voids or properties empty for refurbishment. Prior to work on the water system the Contractor will inspect the water storage tank, check the system, flush and chlorinate or replace any shower head. During the period of works the contractor will be responsible for running all taps weekly. This must be recorded. Before the property is re-occupied the Housing Officer will run all taps at letting stage.
- Where properties are having capital works which affect the water system and tenants remain in occupation. The Contractor will inspect the water storage tank, check the system, flush and chlorinate or replace any shower heads. During the period of work the contractor will be responsible for running all taps weekly. This must be recorded.
- Where tenants of sheltered schemes with combined water systems are away from their property for periods of over one week they are advised to ensure that all taps are run prior to re-occupation in circumstances which the Council is made aware.

- For general needs properties not in the Councils direct control advice to tenants will be issued prior to occupation in the tenant information pack.

9.0 Emergency Procedures

The Council has prepared procedures detailing the action necessary in the event of an outbreak of Legionnaires Disease for which it is responsible. In addition further Emergency Procedures highlight actions to follow in the event of a Positive Sample Analysis or continued Loss of System Control – See appendices.

10.0 Review

This policy will be subject to thorough and critical review initiated by the Housing and Property Services Health and Safety Coordinated with the participation of all interested parties named in the Policy and the Water Hygiene Contractor.

- At least every year
- Following a report of a non-compliance with the policy or any supporting procedure
- Following an actual or suspected case of Legionnaires Disease with which the Council is associated
- Following changes to resources, officer's roles and responsibilities, legislation or guidance or contractor.

11.0 Policy Monitoring

The Housing and Property Services Health and Safety Coordinator together with the Principal Surveyor will monitor the implementation of this policy

12.0 Limitations

This policy is intended to assist with the completion and communication of Water Hygiene and the Control of Legionnaires disease and it does not supersede any statutory obligation placed on the Council. Queries regarding health safety or welfare can be addressed by contacting the Governance and Business Resilience Manager.

APPENDIX 1

BUILDING MANAGERS WATER HYGIENE CHECKLIST

Action Point 1

Make sure you have a current water hygiene risk assessment for your building. If not, speak directly to Property Services.

Action Point 2

Following risk assessments make sure appropriate remedial actions have been taken (or programmed) to minimise the risk of Legionnaires' disease.

Action Point 3

Ensure that a site specific written scheme of control exists for your building and you have a water hygiene log book.

Action Point 4

Nominate an individual(s) for your premises that will be responsible for carrying out the routine water hygiene tasks for the building. This may be you. List them within the written scheme of control and site log books.

Action Point 5

Never permit any changes to the buildings hot or cold water system e.g. additional taps, showers, removal of sinks, reducing water temperatures etc. without first seeking advice from Property Services.

Action Point 6

Make sure any agreed changes to the buildings water system are included on the schematic within the risk assessment and also included within the written scheme of control.

Action Point 7

Seek advice from Property Services and/or the Health and Safety Officer in any cases of doubt.

APPENDIX 2

EMERGENCY PROCEDURE 1

Management of Aerobic Colony Count or TVC (Total Viable Count) in Water System

Not Legionella SP

Issue 1 – Positive Sample taken from Supply

Site Specific Water Sample Taken = ACC or TVC found in sample.

Drinking Water

Stage 1 - Is the supply affected a designated drinking water outlet?

1. Yes – Is the count above 300 (All drinking water outlets should be below 300).
2. Check risk assessment controls have been adopted correctly
3. Seek advice from Water Quality Management Company about implementation.
4. Resample within appropriate time scale

If not above 300tvc then within parameters for Legionella Management & Control.

No further action required.

Non - Drinking Water

Stage 2 – Where the supply is non-drinking water.

Is the count below 10,000? = Yes

Within parameters for Legionella Management & Control. No further action required.

Count between 10,000 – 100,000

1. Ensure all risk assessment controls are fully implemented.
2. Identify any outstanding controls not fully implemented or failing.
3. See advice from Water Quality Management Company about implementation
4. Resample within appropriate timescale

Count over 100,000

1. Arrange representative sample of whole system immediately
2. Shot dose with appropriate biocide as a precaution
3. Review site risk assessments and controls with Water Quality Management Company

4. Implement additional controls advised
5. Resample until control achieved

EMERGENCY PROCEDURE 2

Managing the detection of Legionella sp above 1000cfu in a water system

Issue 2 = Receipt of positive sample notification

Stage 1 = Contract Administrator to ensure relevant personnel made aware

- a. Head of Housing and Property Services
- b. Property Services Manager
- c. Governance and Business Resilience Manager
- d. Housing and Property Services Health and Safety Coordinator
- e. Building Responsible Manager
- f. Water Quality Contractor

Stage 2 = Contract Administrator to arrange representative samples to be taken across whole water system immediately. If there are insufficient samples to indicate the level of contamination across the system without doubt assume the colonisation is representative across the whole.

Stage 3 = Establish the actual or assumed level of contamination.

Isolated outlet

Partial system

Whole system

Stage 4 = Consider Incident Management team – Inclusive of Corporate Communications Officer if:

- a. The building can no longer be used safely for the purpose it was intended.
- b. The premises is sheltered or residential premises housing elderly or vulnerable persons.
- c. There are aerosol producing outlets within the building? – Showers, spa baths
- d. The outlets subject to the contamination cannot be isolated and any aerosol producing outlets within the building cannot be isolated.
- e. Additional control measures have been implemented but this has not brought the system to within acceptable parameters.

Ensure

A full record of all additional control measures implemented is kept from notification of the initial reading to successful control.

If appropriate escalate to Director Team where there may be an impact upon Organisation Reputation or a significant risk to any section of the public or employees in relation to contracting ill health consequences.

APPENDIX 3

ADDITIONAL RESPONSIVE CONTROL MEASURE TO BE CONSIDERED

1. Remove aerosol producing outlets from use
2. Instigate complete water system shut down
3. Instigate partial water system shut down
4. Full premises closure
5. Partial premises closure
6. Implement daily water flushing regime
7. Carry out a disinfection of cold water system
8. Carry out system resample following completion of chemical disinfection
9. Carry out thermal disinfection – ensure records are taken and temperatures recorded
10. Temperatures must achieve 60 degrees Celsius in one hour
11. Identify where sentinels / outlets did not reach 60 degrees – record and resample
12. Increase frequency of flushing
13. Carry out chemical disinfection – Ensure COSHH assessment in place
14. Replace shower heads with Legionella filter heads
15. Replace scaled taps
16. Increase temperature of Calorifiers
17. Install trace heating for hot water system
18. Replace Calorifiers if a temperature of 60 degrees Celsius cannot be achieved
19. Check the stratification pump is operating correctly
20. Replace Calorifiers with instantaneous water heaters
21. Replace cold water tank if 24 hour water turnover cannot be achieved
22. Ensure cold water tank clean with correctly fitting lid
23. Ensure cold water tank inlet and outlet pipe directly opposite each other

24. Install water softeners to reduce lime scale build
25. Install scale incubators
26. Install automatic chemical dosing system
27. Insulate hot pipework
28. Insulate cold pipework
29. Cut back dead legs
30. Remove little used pipework
31. Replace pipework – corroded or affected sections
32. Replace whole system pipework
33. Are TMV's sited as close as possible to point of use?
34. Review Risk Assessments
35. Commission Independent Contractor Review of Affected system
36. Review premises schematic

APPENDIX 4

FLUSHING GUIDANCE

a) Flushing infrequently used outlets

Shower heads or taps must be flushed through on a weekly basis to ensure any contamination that might occur is kept to a low level. The first 30 seconds to 1 minutes contain the highest count of bacteria if present and staff should avoid contact with any spray as a precaution.

Showers –

Run water from both hot and cold supplies or warm if on a single mixer for 3 minutes. If the shower has a fixed head run for 3 minutes in total – the first minute being slow rate of flow and then turn the flow rate up for final 2 minutes.

Taps – As per above for a total of 3 minutes

b) Flushing outlets with positive legionella TVC

This flushing will only be completed as part of an Emergency Control Procedure as outlined in Appendix 1 or 2. It will only be completed with guidance from the Water Quality Management Company Contracts Manager in conjunction with a compliant risk assessment inclusive of method statement and mandatory PPE considerations to reduce exposure to mist / aerosol exposure. Each situation will depend upon circumstances but likely considerations may include

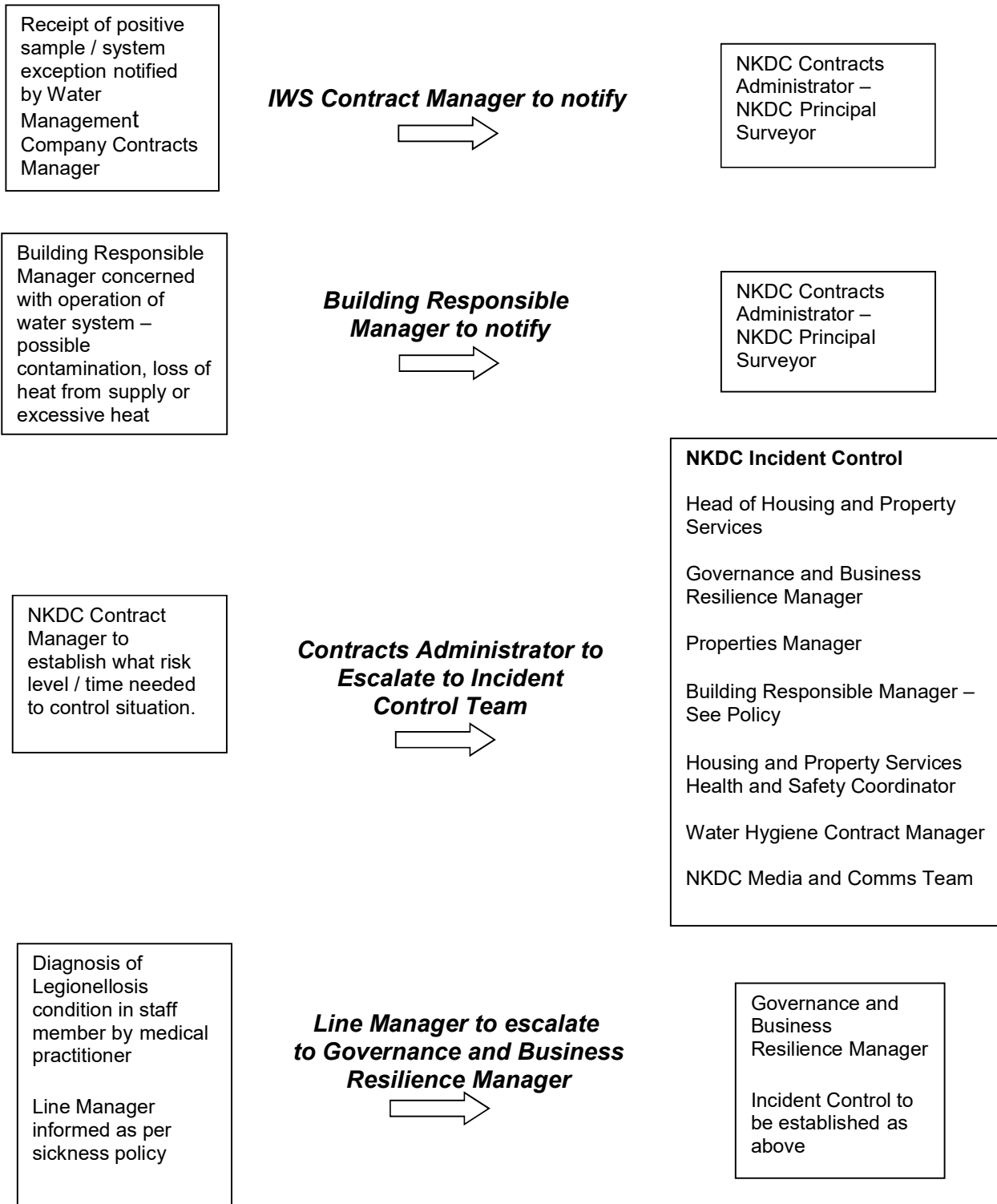
PPE – Face mask LEVEL FFP3 disposable

Disposable overalls and shoe covers

Disposable gloves

APPENDIX 5

EMERGENCY CONTACT PROCESS



Where Contract Administrator not available make contact with Property Officer or Property Health and Safety Coordinator

Appendix 6

HSG274 Part 2 - Guidance on the Maintenance of Water Systems

Service	Action to take	Frequency
Calorifiers	Inspect calorifier internally by removing the inspection hatch or using a boroscope and clean by draining the vessel. The frequency of inspection and cleaning should be subject to the findings and increased or decreased based on conditions recorded.	Annually, or as indicated by the rate of fouling
	Where there is no inspection hatch, purge any debris in the base of the calorifier to a suitable drain Collect the initial flush from the base of hot water heaters to inspect clarity, quantity of debris, and temperature	Annually, but may be increased as indicated by the risk assessment or result of inspection findings
	Check calorifier flow temperatures (thermostat settings should modulate as close to 60 °C as practicable without going below 60 °C) Check calorifier return temperatures (not below 50 °C).	Monthly
Hot water services	For non-circulating systems: take temperatures at sentinel points (nearest outlet, furthest outlet and long branches to outlets) to confirm they are at a minimum of 50 °C within one minute (55 °C in healthcare premises)	Monthly
	For circulating systems: take temperatures at return legs of principal loops (sentinel points) to confirm they are at a minimum of 50 °C (55 °C in healthcare premises). Temperature measurements may be taken on the surface of metallic pipework	Monthly
	For circulating systems: take temperatures at return legs of subordinate loops, temperature measurements can be taken on the surface of pipes, but where this is not practicable, the temperature of water from the last outlet on each loop may be measured and this should be greater than 50 °C within one minute of running (55 °C in healthcare premises). If the temperature rise is slow, it should be confirmed that the outlet is on a long leg and not that the flow and return has failed in that local area	Quarterly (ideally on a rolling monthly rota)
	All HWS systems: take temperatures at a representative selection of other points (intermediate outlets of single pipe systems and tertiary loops in circulating systems) to confirm they are at a minimum of 50 °C (55 °C in healthcare premises) to create a temperature profile of the whole system over a defined time period	Representative selection of other sentinel outlets considered on a rotational basis to ensure the whole system is reaching satisfactory temperatures for legionella control
POU water heaters (no greater than 15 litres)	Check water temperatures to confirm the heater operates at 50–60 °C (55 °C in healthcare premises) or check the installation has a high turnover	Monthly–six monthly, or as indicated by the risk assessment

Combination water heaters	Inspect the integral cold water header tanks as part of the cold water storage tank inspection regime, clean and disinfect as necessary. If evidence shows that the unit regularly overflows hot water into the integral cold water header tank, instigate a temperature monitoring regime to determine the frequency and take precautionary measures as determined by the findings of this monitoring regime	Annually
	Check water temperatures at an outlet to confirm the heater operates at 50–60 °C	Monthly
Cold water tanks	Inspect cold water storage tanks and carry out remedial work where necessary	Annually
	Check the tank water temperature remote from the ball valve and the incoming mains temperature. Record the maximum temperatures of the stored and supply water recorded by fixed maximum/minimum thermometers where fitted	Annually (Summer) or as indicated by the temperature profiling
Cold water services	Check temperatures at sentinel taps (typically those nearest to and furthest from the cold tank, but may also include other key locations on long branches to zones or floor levels). These outlets should be below 20 °C within two minutes of running the cold tap. To identify any local heat gain, which might not be apparent after one minute, observe the thermometer reading during flushing	Monthly
	Take temperatures at a representative selection of other points to confirm they are below 20 °C to create a temperature profile of the whole system over a defined time period. Peak temperatures or any temperatures that are slow to fall should be an indicator of a localised problem	Representative selection of other sentinel outlets considered on a rotational basis to ensure the whole system is reaching satisfactory temperatures for legionella control
	Check thermal insulation to ensure it is intact and consider weatherproofing where components are exposed to the outdoor environment	Annually
Showers and spray taps	Dismantle, clean and descale removable parts, heads, inserts and hoses where fitted	Quarterly or as indicated by the rate of fouling or other risk factors, eg areas with high risk patients
POU filters	Record the service start date and lifespan or end date and replace filters as recommended by the manufacturer (0.2 µm membrane POU filters should be used primarily as a temporary control measure while a permanent safe engineering solution is developed, although long-term use of such filters may be needed in some healthcare situations)	According to manufacturer's guidelines

Base exchange softeners	Visually check the salt levels and top up salt, if required. Undertake a hardness check to confirm operation of the softener	Weekly, but depends on the size of the vessel and the rate of salt consumption
	Service and disinfect	Annually, or according to manufacturer's guidelines
Multiple use filters	Backwash and regenerate as specified by the manufacturer	According to manufacturer's guidelines
Infrequently used outlets	Consideration should be given to removing infrequently used showers, taps and any associated equipment that uses water. If removed, any redundant supply pipework should be cut back as far as possible to a common supply (e.g. to the recirculating pipework or the pipework supplying a more frequently used upstream fitting) but preferably by removing the feeding 'T' Infrequently used equipment within a water system (i.e. not used for a period equal to or greater than seven days) should be included on the flushing regime Flush the outlets until the temperature at the outlet stabilises and is comparable to supply water and purge to drain Regularly use the outlets to minimise the risk from microbial growth in the peripheral parts of the water system, sustain and log this procedure once started For high risk populations, e.g. healthcare and care homes, more frequent flushing may be required as indicated by the risk assessment	Weekly, or as indicated by the risk assessment
TMVs	Risk assess whether the TMV fitting is required, and if not, remove Where needed, inspect, clean, descale and disinfect any strainers or filters associated with TMVs To maintain protection against scald risk, TMVs require regular routine maintenance carried out by competent persons in accordance with the manufacturer's instructions.	Annually or on a frequency defined by the risk assessment, taking account of any manufacturer's recommendations
Expansion vessels	Where practical, flush through and purge to drain. Bladders should be changed according to the manufacturer's guidelines or as indicated by the risk assessment	Monthly–six monthly, as indicated by the risk assessment