# Control of Legionella Bacteria Written Scheme of Control

|  |  |
| --- | --- |
| Client |  |
| Property Name |  |
| Property Address |  |
| Duty Holder |  |
| Responsible Person |  |
| Service Provider |  |

|  |  |
| --- | --- |
| Key Words: | Water legionella |
| Version: | 3.0 |
| Date issued for publication: |  |
| Review date: |  |
| Expiry date: |  |
| Target audience: | Premise managers  Project managers  Maintenance contractors  Internal maintenance staff |

**Version Control and Summary of Changes**

|  |  |  |
| --- | --- | --- |
| **Version number** | **Date** | **Comments**  **(Description of change and amendments)** |
| 2.0 | 12/07/2022 | . |
| 3.0 | 05/02/2025 | Review of documentation following the change in FM delivery model. |
|  |  |  |
|  |  |  |

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## 

## Purpose

The Control of Legionella Bacteria in Norfolk County Council (NCC) managed property is described in three documents:

|  |  |  |
| --- | --- | --- |
| **Document** | **Propose** | **Owner** |
| Policy for the Control of Legionella Bacteria | Explains how NCC will fulfil the legal requirements. | Duty Holder |
| Procedure for the Control of Legionella Bacteria (this document) | Detail management processes and actions | Assistant Director Construction, Facilities Management, and County Farms |
| Written Scheme of Control for Control of Legionella Bacteria  (This document) | The site specific measures and records for each property are contain in the individual written schemes of control. This will also record and audit the precautions in place.  The Written Scheme shall detail responsibilities for all tasks required, location of records, task frequencies, and reporting structure. | Responsible Person for each property |

The purpose of this Control of Legionella Bacteria Written Scheme of Control is to set out the information about individual properties.

This document provides a structure to record either the physical records or the location of digital records of the monitoring and maintenance of the water systems in the property.

# Appendix A Risk Assessment and Review

|  |  |
| --- | --- |
| Date of Risk Assessment |  |
| Recommended date of next assessment |  |
| Location of Risk Assessment |  |

# Appendix B Annual Review of Risk Assessment

Purpose: To review existing Legionella risk assessments to ensure that it remains current and that the management and control systems are effective.

Either insert the Infinity Annual monitoring report or complete the form below:

*NOTE – This form is to be completed by the Responsible Person at least Annually.*

|  |  |
| --- | --- |
| Name of Responsible Person: (completing this audit) |  |
| Date of Audit: |  |
| Contract: |  |
| Location(s) being Audited: (name and brief address) |  |
| Date of last Water Risk Assessment |  |

| **Question** | **Response**  **(should be no)** | **If the response is yes**  **Comments / Action Required** |
| --- | --- | --- |
| Have there been any significant changes to the water system or its use since the last risk assessment | Yes / No / NA |  |
| Have there been any significant changes to the use of the buildings since the last risk assessment? | Yes / No / NA |  |
| Is there any new information available about risk or control measures since the last risk assessment? | Yes /No /NA |  |
| Are the checks on the control measures indicating these may no longer be effective? Examples are repeated temperature fails, positive samples, lack of flushing | Yes / No / NA |  |
| Have there been any changes to key personnel since the last risk assessment? | Yes / No / NA |  |
| Has there been a case of legionnaires disease associated with the system? | Yes / No |  |
| Has the risk profile of those likely to be affected by the system changed since the last risk assessment? | Yes / No |  |
| Is an update of the Legionella Risk Assessment required ? (no changes since it was produced) | Yes / No |  |
| Are there recommendations in the Risk Assessment waiting to be completed? | Yes / No |  |
| Do the schematic diagrams for the water systems need to be updated? | Yes / No |  |
| Has there been a change of RP if yes where is the appointment letter? | Yes / No |  |
| Do any staff involved in the management and controls require additional training to be competent? | Yes / No |  |
| Are there concerns of the competence of any contractors involved with the delivery of the written scheme of controls? | Yes / No |  |
| Check written scheme for accuracy – have any operational or installation issues taken place which would affect the control measures in the written scheme? | Yes / No / NA |  |
| Are any defects NOT recorded and are they NOT being actioned (records available)? | Yes / No / NA |  |
| **General Comments** (If required) | | |
|  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Signed: |  | Date: |  |

# Appendix C Schematic

|  |  |
| --- | --- |
| **Date of Schematic** |  |
| **Location of Schematic (or copy attached)** |  |

# Appendix D Water Related Assets

**Propose:** To record the assets at the Property and the location of the maintenance or monitoring records, the information for this table is contained in the Risk Assessment

| **Asset** | **Quantity** | **Appendix to record results** | **Required Yes/No** | **Location of records** |
| --- | --- | --- | --- | --- |
| Mains Water Supply (MAINS) |  | Appendix G Annual Monitoring |  |  |
| Cold Water Storage Tanks (CWST) |  | Appendix H Cold Water Storage Tank Inspection  Appendix I Stored Cold Water Quality Checks  Appendix R CWST Drop Test |  |  |
| Calorifiers |  | Appendix E Temperature Monitoring  Appendix J Calorifier Annual Inspection |  |  |
| Plate Heat Exchangers |  | Appendix E Temperature Monitoring |  |  |
| Combination Water Heaters |  | Appendix E Temperature Monitoring |  |  |
| Point of Use Water Heaters |  | Appendix E Temperature Monitoring |  |  |
| Instantaneous Water Heaters |  | Appendix E Temperature Monitoring |  |  |
| Showers |  | Appendix K Shower and Spray tap cleaning |  |  |
| TMVs |  | Appendix L TMV Servicing  Appendix M - TMV Annual Comparative Assessment |  |  |
| Water Softeners |  | Appendix O Water Softeners Weekly Checks  Appendix P Water Softeners Six Monthly Service |  |  |
| Expansion Vessels |  | Appendix Q Expansion Vessels |  |  |
| Additional Assets\* |  | Appendix E Temperature Monitoring |  |  |
| Sentinel Outlets |  | Appendix E Temperature Monitoring |  |  |
| Representative Outlets |  | Appendix E Temperature Monitoring |  |  |
| Infrequently Used Outlets (Dead Legs) |  | Appendix F Flushing |  |  |

\*Includes Air Conditioning Systems Single Zone, Air Handling Units, Chlorine Dioxide Units, Feed and Expansion Tanks, Fire Systems, Grey Water Systems, Humidification Systems, Irrigation Systems, Other Systems, Spray Pressure Washers, Swimming Pools and Vehicle Washers

# Appendix E Temperature Monitoring

Either a copy of or the location of the Infinity Temperature Monitoring

|  |  |  |
| --- | --- | --- |
| **Month** | **Temperatures out of scope** | **Action taken** |
| Jan |  |  |
| Feb |  |  |
| Mar |  |  |
| Apr |  |  |
| May |  |  |
| Jun |  |  |
| Jul |  |  |
| Aug |  |  |
| Sep |  |  |
| Oct |  |  |
| Nov |  |  |
| Dec |  |  |

# Appendix F Flushing

Either a copy of or the location of the Infinity Flushing records.

If flushing is not carried out by Infinity attach the details of the flushing conducted by the site staff.

# Appendix G Spare

# Appendix H Cold Water Tank Inspections

Either a copy of or the location of the Infinity CWST Inspection records.

|  |  |  |  |
| --- | --- | --- | --- |
| **CWST Number** | **Date** | **Defects found** | **Remedial Action Taken** |
|  |  |  |  |
|  |  |  |  |
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# Appendix I Spare

# Appendix J Calorifier Annual Inspection

Either a copy of or the location of the Calorifier Annual Inspection

|  |  |  |  |
| --- | --- | --- | --- |
| **Calorifier Number** | **Date** | **Defects found** | **Remedial Action Taken** |
|  |  |  |  |
|  |  |  |  |
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# Appendix K Shower and Spray Taps

Either a copy of or the location of the Shower and Spray Tap Cleaning records

|  |  |  |  |
| --- | --- | --- | --- |
| **Shower number or location** | **Date** | **Defects found** | **Remedial Action Taken** |
|  |  |  |  |
|  |  |  |  |
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# Appendix L TMV Servicing

Either a copy of or the location of the TMV service records

|  |  |  |  |
| --- | --- | --- | --- |
| **TMV Number** | **Date** | **Defects found** | **Remedial Action Taken** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Appendix M - TMV Annual Comparative Assessment

|  |  |  |  |
| --- | --- | --- | --- |
| **TMV number (From Risk Assessment)** | **Location (from Risk Assessment)** | **Scaling Risk**  **Yes / No** | **TMV required**  **Yes / No** |
|  |  |  |  |
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# Appendix N – Spare Blind ends waiting removal

# Appendix O Water Softeners Weekly Checks

Either a copy of or the location of the Weekly Water Softener checks

Weekly records should include:

* Examination of tank and pipework for leaks.
* That unit is fully charged with brine and that there are adequate supplies in stock.
* Check float functions correctly and cuts off at correct level.
* Operation of all valves to ensure that they are free to operate and to minimise any tendency towards sticking. Return all valves to original positions.
* Check that the injector line is not air locked.
* 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.

# Appendix P Water Softeners Six Monthly Service

Either a copy of or the location of the Six Monthly Water Softener service

Six Monthly records should include:

* On-site analysis, log water conditions, adjust dosing as required to maintain water conditions within the prescribed limits.
* Check and ensure correct settings of time switch.
* Record readings on hours run meter (if fitted).
* Inspect and undertake cleaning of unit and replace any defective items as necessary.
* Inspect conductivity cell for signs of build-up of scale, should a build-up be evident it will be necessary to clean with a suitable bristle brush. Extreme care should be exercised when undertaking this task.
* Where possible test and ensure that the switches, controllers and associated components are operating correctly, recalibrate as required.
* Check and ensure all drain pipework/assemblies, vents and overflows are clean and free from obstruction.
* Brine tank (where fitted separately), Clean as appropriate, Check with brineometer that brine is fully saturated. Notes: If brine is not fully saturated, the brine system requires further investigation. Client should be advised and the matter referred to the manufacturer or equipment supplier.
* Overflow and drain, Clean and clear off debris and dirt.
* Electrical control system (where fitted), Check condition of all electrical connections.
* Regeneration sequence, Put plant into regeneration sequence and check all stages of operation.
* Pressure drop over softener (where provision to measure exists), Check and record in plant log. Note - A gradual build-up in back pressure could indicate fouling or breakdown of the ion exchange medium.
* Booster pumps, Carry out maintenance programme as detailed in Pumps - Water Pumping Pressure Booster Sets (SFG 45-12).
* Ancillary controls and probes (where fitted): a) Conductivity b) Electro-Chlorination, Inspect and check operation and report.
* Overhaul individual valves as detailed in Valves - Tap and Stop Cock Fittings (SFG 61-02).
* Back flow prevention devices, Check operation and for signs of corrosion and pipework deterioration.
* Water test, Final water test to be taken. Take a water sample, test and log pH value. Sample the water hardness as this level will affect the sodium levels and increase the likelihood of corrosion. High levels of hardness will affect the disinfection regime and effective residual level of chlorine. Sampling of water systems down stream of supply should be undertaken to monitor possible salt levels increases in the water system. Back pressure readings will give some indication of the condition of the resin bed. Take sample and send to laboratory if part of the service schedule which was agreed with the client.

# Appendix R Positive Legionella Sample Results

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Location** | **Result** | **SG** | **Action Taken** |
|  |  |  |  |  |
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# Appendix S Expansion Vessels

Either a copy of or the location of the Expansion Vessels Flushing

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| --- | --- | --- | --- |
| **Expansion Vessel Number** | **Date** | **Defects found** | **Remedial Action Taken** |
|  |  |  |  |
|  |  |  |  |
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# Appendix T Disinfection Certificates

Either a copy of or the location of disinfection certificates