

## Legionella Written Scheme

Donnini House

April 2024

Version	Author	Date	Comments/amendments
1.0	E Jorgenson	12/02/2020	N/A
2.0	E Jorgenson	10/06/2020	Changes to management structure
3.0	E Jorgenson	21/07/2020	Changes to asset register and scheme following the risk assessment rewrite
4.0	E Jorgenson	04/02/2022	Changes following legionella risk assessment
5.0	E Jorgenson	21/10/2022	Changes as part of risk assessment review and change to management structure
6.0	A. Graham	08/11/2023	Changes following legionella risk assessment
7.0	A Graham	17/04/2024	Update due to changes of risk assessment contractor.

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## 1. Purpose

The purpose of this document is to detail the site-specific written scheme for Donnini House

## 2. Scope

This written scheme covers the domestic water system only within the property. There is no risk linked with any close systems in the property and therefore this has not been included in the scope.

## 3. Risk Assessment

All risk assessments for believe housing are completed by a Legionella Control Association registered company who have been selected through a full and proper procurement exercise.

This risk assessment was carried out on the 7<sup>th</sup> November 2023. The site will be audited on an annual basis to assess the validity of the assessment and when it is considered no longer valid a new risk assessment will be arranged. The assessment may be considered invalid when;

- a) There are changes to the water system or its use;
- b) Changes to the use of the building in which the water system is installed
- c) The availability of checks indicating that control measures are no longer effective
- d) Changes in key personnel
- e) A case of legionnaires disease/legionellosis associated with the system.

Following the risk assessment, an action plan has been formulated and details of this can be found located in on the following file path

[https://cdhg.sharepoint.com/:b:/s/complianceandfacilities/EdpnxidWZStOq\\_fBfSosyulBIki3KR-OCRCzqycJPMOtkA?e=HltnXg](https://cdhg.sharepoint.com/:b:/s/complianceandfacilities/EdpnxidWZStOq_fBfSosyulBIki3KR-OCRCzqycJPMOtkA?e=HltnXg)

This shows all the recommendations made in the risk assessment and the actions that believe housing are taking.

#### 4. Management Structure

The management structure for the organisation is as follows.

<b>Statutory Duty Holder</b>	
<b>Position</b>	Chief Executive
<b>Address</b>	believe housing, Coast House, Spectrum 4, Spectrum Business Park, Seaham
<b>Postcode</b>	SR7 7TT
<b>Nominated Responsible Person</b>	
<b>Position</b>	Compliance Manager
<b>Address</b>	believe housing, Coast House, Spectrum 4, Spectrum Business Park, Seaham
<b>Postcode</b>	SR7 7TT
<b>Training</b>	City and Guilds Qualificatons “management of legionella bacteria in hot and cold water systems” and “hazard identification and risk assessment of water systems within buildings” and regular attendance of the north east councils legionella focus group (NECLFG).
<b>Nominated Responsible Person (Deputy)</b>	
<b>Position</b>	Compliance Officer (Water)
<b>Address</b>	believe housing, Coast House, Spectrum 4, Spectrum Business Park, Seaham
<b>Postcode</b>	SR7 7TT
<b>Phone</b>	07901510712
<b>e-mail</b>	Andrew.graham@believehousing.co.uk
<b>Training</b>	City and Guilds Qualificatons “management of legionella bacteria in hot and cold water systems” and “hazard identification and risk assessment of water systems within buildings” and regular attendance of the north east councils legionella focus group (NECLFG).
<b>Facilities Officer</b>	
<b>Address</b>	Pam Wilson
<b>Position</b>	Facilities Officer
<b>Phone</b>	0191 814 2857 / 07384523628
<b>e-mail</b>	<a href="mailto:pamela.wilson@believehousing.co.uk">pamela.wilson@believehousing.co.uk</a>
<b>Training</b>	In house e-learning package
<b>Risk Assessment Contractor – SMS Environmental</b>	
<b>Address</b>	Strathclyde Business Park, Suite1/2 Avondale House, Bellshill ML4 3NJ
<b>Postcode</b>	ML4 3NJ
<b>Contact</b>	Jemma Tennant
<b>Phone</b>	07521390672
<b>e-mail</b>	<a href="mailto:j.tennant@sms-environmental.co.uk">j.tennant@sms-environmental.co.uk</a>

<b>Water Monitoring Contractor – Hsl Compliance Ltd</b>	
<b>Address</b>	Suit 7 (Phase 2), The Grainger Suite, Dobson House, Regent Centre, Newcastle upon Tyne
<b>Postcode</b>	NE3 3PF
<b>Contact</b>	David Armstrong and Phil Lynas
<b>Phone</b>	07788432869/078233499745
<b>e-mail</b>	<a href="mailto:David.Armstrong@hslcompliance.com">David.Armstrong@hslcompliance.com</a> and <a href="mailto:Phil.Lynas@hslcompliance.com">Phil.Lynas@hslcompliance.com</a>
<b>Little used flushing - Contego</b>	
<b>Address</b>	Unit 4, Maple Way, Aycliffe Business Park, Newton Aycliffe, County Durham, DL5 6BF
<b>Postcode</b>	DL1 1QL
<b>Phone</b>	07966473063
<b>e-mail</b>	<a href="mailto:Martin.ferguson@contegofacilities.com">Martin.ferguson@contegofacilities.com</a> or <a href="mailto:enquires@Contegogroup.uk">enquires@Contegogroup.uk</a>

Full details regarding the responsibilities of the Duty Holder, Responsible Person and Deputy Responsible Person can be found in the legionella policy.

Full details of the responsibilities of the contractors employed by believe housing, to complete the legionella programs can be found detailed in the specification of the tender and water hygiene procedure.

#### 4. Asset Register

	Asset Number	Location (detail any specific access requirements)	Serving
Cold Water Storage Tanks		None	
Water Heaters	CAL01	Boiler House	DHWS to property (linked to CAL02)
	CAL02	Boiler House	DHWS to property (linked to CAL01)
Showers	SHR01	Flat 2 Bathroom	1 x SHR (thermostatic)
	SHR02	Flat 3 Bathroom	1 x SHR (thermostatic)
	SHR03	Flat 4 Bathroom	1 x SHR (thermostatic)
	SHR04	Flat 5 bathroom	1 x SHR (thermostatic)
	SHR05	Flat 6 Bathroom	1 x SHR (thermostatic)
	SHR06	Ground Floor Shower Room	1 x SHR (electric)
	SHR07	Flat 27 Bathroom	1 x SHR (thermostatic)
	SHR08	Flat 26 Bathroom	1 x SHR (thermostatic)
	SHR09	Flat 25 Bathroom	1 x SHR (thermostatic)
	SHR10	Flat 24 Bathroom	1 x SHR (thermostatic)
	SHR11	Flat 23 Bathroom	1 x SHR (thermostatic)
	SHR12	Flat 22 Bathroom	1 x SHR (thermostatic)
	SHR13	Flat 15 Bathroom	1 x SHR (thermostatic)
	SHR14	Flat 16 Bathroom	1 x SHR (thermostatic)
	SHR15	Flat 17 Bathroom	1 x SHR (thermostatic)
	SHR16	Flat 18 Bathroom	1 x SHR (thermostatic)
	SHR17	Flat 19 Bathroom	1 x SHR (thermostatic)
	SHR18	Flat 20 Bathroom	1 x SHR (thermostatic)
	SHR19	Flat 21 Bathroom	1 x SHR (electric)
	SHR20	Flat 14 Bathroom	1 x SHR (thermostatic)
	SHR21	Flat 12 Bathroom	1 x SHR (thermostatic)
	SHR22	Flat 13 Bathroom	1 x SHR (thermostatic)
	SHR23	Flat 11 Bathroom	1 x SHR (thermostatic)
	SHR24	Flat 10 Bathroom	1 x SHR (thermostatic)
	SHR25	Flat 9 Bathroom	1 x SHR (thermostatic)
	SHR26	1 <sup>st</sup> Floor Shower Room	1 x SHR (electric)
TMV's	TMV01	Ground Floor Accessible WC	1 x WHB
	TMV02	Ground Floor Ladies WC	1 x WHB
	TMV03	Flat 2 Bathroom	1 x WHB
	TMV04	Flat 3 Bathroom	1 x WHB
	TMV05	Flat 4 Bathroom	1 x WHB
	TMV06	Flat 5 Bathroom	1 x WHB
	TMV07	Flat 6 Bathroom	1 x WHB
	TMV08	Ground Floor Shower Room	1 x WHB

TMV09	Flat 27 Bathroom	1 x WHB
TMV10	Flat 26 Bathroom	1 x WHB
TMV11	Flat 25 Bathroom	1 x WHB
TMV12	Flat 24 Bathroom	1 x WHB
TMV13	Flat 23 Bathroom	1 x WHB
TMV14	Flat 22 Bathroom	1 x WHB
TMV15	Flat 15 Bathroom	1 x WHB
TMV16	Guest Room Bathroom	1 x WHB
TMV17	Flat 16 Bathroom	1 x WHB
TMV18	Flat 17 Bathroom	1 x WHB
TMV19	Flat 18 Bathroom	1 x WHB
TMV20	Flat 19 Bathroom	1 x WHB
TMV21	Flat 20 Bathroom	1 x WHB
TMV22	Flat 21 Bathroom	1 x WHB
TMV23	Flat 14 Bathroom	1 x WHB
TMV24	Flat 12 Bathroom	1 x WHB
TMV25	Flat 13 Bathroom	1 x WHB
TMV26	Flat 11 Bathroom	1 x WHB
TMV27	Flat 10 Bathroom	1 x WHB
TMV28	Flat 9 Bathroom	1 x WHB and 1 x BTH
TMV29	Flat 8 Bathroom	1 x WHB
TMV30	1 <sup>st</sup> Floor Shower Room	1 x WHB
TMV31	Flat 2 Bathroom	1 x SHR
TMV32	Flat 3 Bathroom	1 x SHR
TMV33	Flat 4 Bathroom	1 x SHR
TMV34	Flat 5 Bathroom	1 x SHR
TMV35	Flat 6 Bathroom	1 x SHR
TMV36	Flat 7 Bathroom	1 x WHB
TMV37	Flat 9 Bathroom	1 x SHR
TMV38	Flat 10 Bathroom	1 x SHR
TMV39	Flat 11 Bathroom	1 x SHR
TMV40	Flat 12 Bathroom	1 x SHR
TMV41	Flat 13 Bathroom	1 x BTH and 1 x SHR
TMV42	Flat 14 Bathroom	1 x SHR
TMV43	Flat 15 Bathroom	1 x SHR
TMV44	Flat 16 Bathroom	1 x SHR
TMV45	Flat 17 Bathroom	1 x SHR
TMV46	Flat 18 Bathroom	1 x SHR
TMV47	Flat 19 Bathroom	1 x SHR
TMV48	Flat 20 Bathroom	1 x SHR
TMV49	Flat 22 Bathroom	1 x SHR
TMV50	Flat 23 Bathroom	1 x SHR
TMV51	Flat 24 Bathroom	1 x SHR
TMV52	Flat 25 Bathroom	1 x SHR
TMV53	Flat 26 Bathroom	1 x SHR
TMV54	Flat 27 Bathroom	1 x SHR

Other Systems	EXP01	Boiler House	Expansion vessel associated with CAL01
	EXP02	Boiler House	Expansion vessel associated with CAL02

## 5. Scheme of Control

### 5.1 Site description

Donnini House is a purpose-built housing plus unit containing 26 self-contained flats as well as a Communal Kitchen and Lounge area. The water system comprises of two calorifiers located in the external plant room which supply hot water to the entire building. All cold water is supplied via mains. There are two incoming mains to the property. One in the external boiler house feeding the hot water and one bib tap and the other entering the in the refuse store feeding cold water to the property. The hot and cold-water systems are on and in used 24/7.

### 5.2 Building use and access

This unit is occupied by individuals over 55 most of whom will be susceptible to contracting illnesses such as legionellosis. Access to the building is via a fob system and the fob for the main entrance door located in an external key safe (code 1973A). Similarly access to the onsite office where the premises log held can be gained via the key held in the key safe by the office door (code 3478). Access to the individual tenant's flats must be arranged with the tenant as no keys for these are held on site.

### 5.3 Monitoring program

The risk assessment has shown that there is a reasonable foreseeable risk of legionella contamination in this building. Therefore, a scheme of control has been formulated and implemented at this site. The current program in place on site is a physical treatment program using temperature rather than biocides as a form of control. The specific program for this site is detailed as follows;

#### Weekly tasks

Contego will flush all outlets in communal areas and void flats for 5 minutes. Locations of void flats will be sent to Contego weekly to ensure that all little used outlets are captured. Usage of the water in the tenant's flats is the responsibility of the tenants and information on legionella control has been provided. All little used flushing will be recorded weekly in the property's premises file.

#### Monthly tasks

Hsl Compliance will visit the site once every month and monitor hot and cold-water temperatures.

Remote monitoring has been added to record the flow and return temperature of the two calorifiers and hot and cold water temperatures in the following locations.

Location	Floor	Item	Water Source
Boiler Room Bib Tap (Cold only)	Ground Floor (external plant room)	Sink	CAL01 and MWS01
Flat 20 Kitchen Sink	1 <sup>st</sup> Floor	Sink	CAL01 and MWS01
Flat 25 Kitchen Sink	Ground Floor	Sink	CAL01 and MWS01
Flat 6 Kitchen Sink	Ground Floor	Sink	CAL01 and MWS01
Lounge Kitchen	Ground Floor	Sink	CAL01 and MWS01

Remote monitoring outputs are collated into a report and sent to the Compliance team weekly to monitor and take any actions necessary.

Manual monitoring will be taken monthly from the from the flow and return of the heaters located in the boiler house (CAL01&02)

Hot water temperatures will be taken from communal sentinels located in

Location	Floor	Item	Water Source
Laundry (far sentinel)	Ground Floor	Sink	CAL01-02
Communal Kitchen (far sentinel)	Ground Floor	Sink	CAL01-02

Cold water temperatures will be taken from communal sentinel outlets located in

Location	Floor	Item	Water Source
Plant Room Bib Tap (far sentinel)	Ground Floor	Sink	MWS02
Laundry (far sentinel)	Ground Floor	Sink	MWS01
Communal Kitchen (far sentinel)	Ground Floor	Sink	MWS01

Where access to the individual flats is gained to complete shower cleans or TMV servicing the hot and cold temperature will be recorded at this time, ensuring good temperature monitoring coverage throughout the year. If an outlet is controlled by a TMV the temperature of the water entering the valve will be recorded.

All hot water from water heaters must be stored at above 60°C and supplied to hot outlets or thermostatic mixing valves at above 50°C within 1 minute. All cold water must be stored at below 20°C and supplied to cold outlets or thermostatic mixing valves at below 20°C within 2 minutes.

Due to the potential vulnerability of some of the residents in the property legionella samples will be taken at sentinel points in the scheme monthly. See section eight for more details.

### Quarterly

The 26 showers located throughout the property will be cleaned and disinfected quarterly in line with the method statements that hsl have submitted and in accordance with the ACoP L8 and HSG274 pt2.

The drain valves on the water heaters located in the Boiler House will be opened on a quarterly basis to purge all accumulated sludge from the vessel. If the drain water shows a high accumulation of dirt in the vessel a clean and disinfection will be carried out in line with the method statements that hsl have submitted and in accordance with the ACoP L8 (2014), and HSG 274 pt2.

The expansion vessels in the Boiler House will be flushed to drain on a quarterly basis



### **Six-monthly**

All 54 TMV's on site will be subject to a failsafe testing on a 6-monthly basis in accordance with the method statements submitted by hsl. If the valve does not pass the failsafe test it will be serviced fully or replaced.

### **Annually**

All 54 TMV's on site will be subject to a full service an annual basis in accordance with the method statements submitted by hsl. If the valve does not pass the failsafe test it will be serviced fully or replaced

## 7 Record Keeping

All records of site visits and little used flushing are kept in the site premises file with the risk assessment and this written scheme.

All other monitoring records are held on the web-based portal Socius which can be accessed by using the following log in details.

Username: [BelieveHousing@socius.com](mailto:BelieveHousing@socius.com)

Password: Thursday16

All records for legionella control will be kept for a minimum of 5 years as per the retention schedule detailed in the Approved Code of Practice L8.

## 8 Microbiological testing

Due to the age and potential vulnerability of the occupants microbiological testing is completed monthly at all sentinel's outlets and any other outlets identified as a cause for concern (e.g. little used, poor temperatures, poor flow etc). All samples taken monthly will be pre flush. If these samples results show levels above 100cfu/L or the correct temperatures are no being achieved (as detailed in section 5.3) the sample frequency will be immediately increased to weekly whilst the underlying issue is resolved. Following the resolution of the situation sampling frequency will be slowly reduced to monthly again.

All sampling will be completed in accordance with BS7592 "sampling for legionella organisms in water and related materials". All samples will be set for analysis at a UKAS accredited laboratory with current ISO standard methods of detection and enumeration of legionella included in the scope of the accreditations. The laboratories used also take part in external QA proficiency schemes to provide extra assurance.

## 9 Remedial Actions

On a regular basis, the Compliance Officer (Water), will check monitoring results on the web-based portal via exception report. All non-compliant results will subject to a desk top investigation to ascertain the extent and consistency of the issue. Where temperatures are consistently unable to achieve the required standards, or the monitoring raises other potential issues the Compliance Officer will raise relevant orders with Internal Repairs or external partners dependant of the works required. The Compliance Officer will advise on time scales for action depending on the risk the issue poses, which will be added to the ticket raised on QL. Where necessary legionella sampling may be requested on a weekly basis until the issue is resolved (see section 8).

Where issues with stagnation or lack of flushing are highlighted, due to a change of building use, CONTEGO will be advised so the little used flushing program can be extended or started to ensure the water turn over in the building is adequate.

## 10 Incident Plan

Where contamination is identified in water systems the following action will be taken at the following thresholds.

Legionella bacteria (cfu/l)	believe housing's actions
up to 100	In the sheltered housing schemes only; The primary concern is protecting susceptible residents and therefore if any legionella is detected an investigation will be carried out and the system resampled
>100 and up to 1000	Either; <ul style="list-style-type: none"> <li>• If the minority of samples are positive, the system will be resampled. If similar results are detected again, the control measures and risk assessment will be reviewed, and any remedial works identified and completed or;</li> <li>• If the majority of the samples taken are positive, the systems may be colonised at a low level. The control measures and risk assessment will be reviewed, and any remedial works identified and completed. A clean and disinfection of the system will be considered however the requirement for this will be decided on a case by case basis, considering all relevant factors.</li> </ul> <p>In both cases the system will be continually resamples until assurance is given that the system is back under control.</p>
>1000	The control measures and risk assessment will be reviewed, and any remedial works identified and completed. A clean and disinfection of the system will also be considered. The system will be continually resampled until assurance is given that the system is back under control.

Where the thresholds above are met the Compliance Team will coordinate the organisations response to the incident. Where input is required from other areas of the organisation groups will be set up to coordinate the response, this may include but not be limited to the Compliance Manager, Assistant Director for Strategic Assets, Major Works Manager, Repairs and Maintenance Manager (Repairs), Facilities Coordinator, Health and Safety Officer, Neighbourhoods Team Leader and any third-party contractors involved in the maintenance of the water system in the affected building. An actions log will be started to document believe housings response to the contamination. This will be shared with the Compliance Manager and all other relevant parties as necessary.

Any incidents of contamination will be reported in the weekly compliance meeting and documented accordingly.

During this time the system will be sampled weekly. Further control measures may be introduced, such as point of use filtration and chemical dosing, to ensure the safety of any users or occupants. In some cases, buildings may have to be temporarily closed for works to be completed.

When works are complete the Compliance Team will continue to sample the system, reducing the frequency gradually until it is assured that control has been regained.

## **11 Actions in response to partial of full system shut down**

### **11.1 Temporary lack of use**

Where the water usage in this property is temporarily reduced little used flushing will be expanded to include those areas which are no longer used. This flushing will be conducted weekly by Contego and a record of this will be made and placed in the legionella section of the premise's logbook.

Where flats become void, these will be accessed, and flushed weekly by CONTEGO, at the same time as the communal areas in the property. Where believe become aware that flats are still tenanted however are unoccupied, the Compliance Team will attempt to contact the tenant. Firstly, the tenant or tenant's representative will be asked to attend the property weekly to flush all outlets. If they are not able to or it becomes apparent, they are not, believe will offer to complete this on their behalf as part of the property's weekly checks. Where tenants are not willing to cooperate, this will be escalated to Neighbourhoods and Safer Neighbourhoods for assistance.

Where the entire property is out of use, the water system will be kept live and managed using hygiene flushing a least once per week at all outlets for a minimum of five minutes.

### **11.2 Recommissioning**

Where hygiene flushing can't be completed, or the water system has had to be drained the system will be fully recommissioned. Where the property has been drained down the system will be refilled, and then a cleansing flush completed before a clean and disinfection is carried out in accordance with method statements that hsl have submitted and in accordance with the ACoP L8 (2014), and HSG 274 pt2. Four days after the clean and disinfection is completed samples will be taken from the properties sentinel outlets to tested for coliforms, E. coli, 37 and 22C TVC's and Legionella. Hygiene flushing will be undertaken weekly until the results are received. If Coliforms, E. coli, or elevated TMV's are detected the sampling point will be cleaned, flushed and retested. If Legionella bacteria is detected the steps taken in section 10 of this written scheme will be taken and which may lead to the system being cleaned and disinfected again.

## **12 Forms/templates to be used**

Little used flushing form

**13 Associated Documents**

Water Hygiene Policy

Water Hygiene Procedure

Procurement Specification

COSHH records for chemicals used on site