## **Newcastle University**

### **Safe Drinking Water**

## **Policy and Procedures**

<b>Revision No</b>	Written By	Date	Review Date
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### **Policy Statement**

Newcastle University recognises its responsibilities under the Health and Safety at Work Etc. Act 1974 and the Control of Substances Hazardous to Health Regulations 1999 to take all reasonable precautions to prevent or control the risks to staff, students and visitors due to the contamination of drinking water supplies.

The university will provide, resource and maintain appropriate management, training and safe systems of work in order to fulfil its commitment.

The guiding principles of control are set out in the HSC publication "Legionnaires' disease: The control of legionella bacteria in the "Water Regulations Guide" published by the Water Regulations Advisory Scheme.

The Duty Holder is the Vice Chancellor, Newcastle University

The university will do all that is reasonably practicable to comply with the requirements of the policy and will make the necessary resources available

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Date: December 2012.

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#### 1.0 Introduction

## 1.1 The purpose of this document

- 1.1.1 This document defines how Newcastle University intends to identify and manage the risks associated with contaminated drinking water.
- 1.1.2 This document forms part of the university safety policy, part 2. http://www.safety.ncl.ac.uk/universitypolicy.aspx
- 1.1.3 This policy will apply to all areas of the university without exception
- 1.1.4 University employees working in buildings owned and operated by others will be subject to the policy of the Landlord or Duty Holder for that building.
  - 1.1.5 This document should be read in conjunction with the university document "The control of legionella bacteria in water systems"

#### 1.2 The Risk

1.2.1 Drinking water must be "wholesome" and this is defined in law by standards for a wide range of substances, organisms and properties of water in regulations. The standards are set to be protective of public health and the definition of wholesome reflects the importance of ensuring that water quality is acceptable to consumers. There is good agreement amongst worldwide on the science behind the setting of health based standards for drinking water and this expert evidence is documented by the World Health Organisation in the Guidelines for Drinking Water Quality.

The legal standards in the UK are those which are set in Europe in the Drinking Water Directive 1998 together with national standards set to maintain the high quality of water already achieved. The standards are strict and include wide safety margins. They cover:

- micro-organisms
- chemicals such as nitrate and pesticides
- metals such as lead and copper
- the way water looks and how it tastes

### 1.3 Sources of Risk

- 1.3.1 The principal sources of risk within the university are;
  - · A mixture of fluid category systems within buildings
  - Uncontrolled alteration and installation of water systems and fittings
  - The multitude of sources of risk within certain buildings
  - The diverse ethnic population of the university.

## 1.4 The Regulations

1.4.1 The Health and Safety at Work etc. Act 1974

Duties under this act extend to the protection of public health which may arise from work activities.

- 1.4.2 The Management of Health and Safety at Work Regulations 1999
  This act provides a broad framework for controlling health and safety at work.
  As well as requiring risk assessments, they also require employers to have access to competent help in applying the provisions of health and safety law.
- 1.4.3 The Control of Substances Hazardous to Health 1999

  The COSHH regulations provide a framework of actions designed to control the risk from a range of hazardous substances including biological agents
- 1.4.4 The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995. (RIDDOR)

  These regulations requires employers and others e.g. the person who has control of the work premises, to report to the HSE, accidents and some diseases that arise out of or in connection with work.
- 1.4.5 The Water Supply (Water Fittings) Regulations 1999

  These regulations make provision for preventing contamination, waste, misuse, undue consumption and erroneous measurement of water supplied by a water undertaker.
- 1.4.6 The Safety Representative and Safety Committee Regulations 1977 and the Health and Safety (Consultation with Employees) Regulations 1996. These regulations require employers to consult trade union safety representatives, other employee representatives or employees where there are no representatives about health and safety matters.

# 2.0 Roles and Responsibilities

2.1 The hierarchy of responsibility for the management of health and safety within the university is documented in the University Safety Policy <a href="http://www.safety.ncl.ac.uk/universitypolicy.aspx">http://www.safety.ncl.ac.uk/universitypolicy.aspx</a> part 1.

### 2.1.1 The Vice Chancellor: Duty Holder (Domestic Water Systems)

- a) Holds overall responsibility for all aspects of the quality and management of water supplies within the university's buildings
- b) Will appoint suitably qualified persons to manage the necessary procedures for the prevention of contamination of domestic water systems.

# The Director of Estate Support Service: Nominated Responsible Person (Domestic Water Systems).

- a) Accept management responsibility for the control of domestic water systems installed in university premises.
- b) Prepare and implement an operational policy to ensure safety of domestic water systems installed in university premises.

# The Head of Maintenance, Estate Support Service: Nominated Responsible Person (Domestic Water Systems).

- a) Implement and maintain the university's planned preventive maintenance system for all operational system installed in university premises.
- b) Ensure that the water undertaker is notified prior to any additions or alterations to domestic water systems are carried out in operational areas.
- c) Ensure that persons carrying out works to operational systems are suitably qualified and competent to do so.
- d) Ensure records of certificates of installation, risk assessments and precautions are maintained.
- e) Put in place arrangements for testing drinking water outlets on a regular basis.
- f) Ensure that the measures for monitoring and controlling the risks associated with domestic water systems are audited annually.

# The Head of Capital Development, Estate Support Service: Nominated Responsible Person (Capital Developments).

- Accept management responsibility for the design, alteration or installation of domestic water systems and from any connected equipment within designated capital project areas.
- b) Ensure that the water undertaker is notified prior to any additions or alterations to domestic water systems be carried out in operational areas.
- c) Ensure that persons carrying out works to systems, outlets and equipment within designated capital project areas are suitably qualified and competent to do so.
- d) Ensure records of certificates of installation, risk assessments and precautions are provided.
- e) Ensure that the measures for monitoring and controlling the risk within designated capital project areas are monitored regularly.

# The Head of Improvements, Estate Support Service: Nominated Responsible Person (Improvement Projects).

- Accept management responsibility for the design, alteration or installation of domestic water systems and from any connected equipment within designated Improvement project areas
- b) Ensure that the water undertaker is notified prior to any additions or alterations to domestic water systems be carried out in operational areas.
- c) Ensure that persons carrying out works to systems, outlets and equipment within designated capital project areas are suitably qualified and competent to do so.
- d) Ensure records of certificates of installation, risk assessments and precautions are provided.

e) Ensure that the measures for monitoring and controlling the risk within designated capital project areas are monitored regularly.

## **Newcastle University, Water Safety Management Group.**

- a) Monitor application of the policy and address any non compliance issues within the remit of the appropriate manager.
- b) Review this policy every two years.

# University Health and Safety Officers / ESS Safety Advisor.

- a) Advise and assist with all safety related matters
- b) Monitor application of the policy.
- c) Report any incidents under RIDDOR
- d) Ensure all members of staff are suitably qualified and/or receive training.

### **Maintenance Officers**

- a) Ensure compliance with the university safe drinking water policy and The Water Supply (Water Fittings) Regulations 1999.
- b) Ensure any remedial works identified in risk assessments or as a result of monitoring and testing are prioritised and carried out.
- c) Ensure the testing regime is adhered to.
- e) Identify the costs of remedial works and ensure that sufficient funds are available to carry the work out.
- Order works from service providers or direct works organisation as required.
- g) Ensure works are completed within timescale and that all documentation is completed as necessary.
- h) Ensure risk assessments are updated.

### Design Engineers, Surveyors, Project Managers and Project Engineers

- a) Ensure compliance with the university safe drinking water policy and The Water Supply (Water Fittings) Regulations 1999.
- b) Ensure systems are designed in accordance with The Water Supply (Water Fittings) Regulations 1999
- c) Ensure systems are installed in accordance with The Water Supply (Water Fittings) Regulations 1999
- d) Ensure all documentation is completed, returned and that risk assessments have been provided or updated.

## **Direct Works / Residences Supervisors, Operatives and Operators**

- a) As instructed, carry out any maintenance tasks required to ensure compliance with the university safe drinking water policy and The Water Supply (Water Fittings) Regulations 1999.
- b) Respond to requests for remedial works and report completion.
- c) Ensure any 'in house' installation work complies with The Water Supply (Water Fittings) Regulations 1999.

- d) Facilitate monitoring and inspection visits by water hygiene service providers and water undertakers.
- e) Ensure all necessary documentation is completed and returned.

# Heads of School / Services, Residence Managers, Technicians and Operators

- a) Ensure compliance with the university safe drinking water policy and The Water Supply (Water Fittings) Regulations 1999.
- b) Facilitate any monitoring, testing, inspection or remedial works as required.
- c) Ensure equipment connected to domestic water systems complies with The Water Supply (Water Fittings) Regulations 1999.
- d) Ensure that no alterations or additions to water systems are carried out without the approval of Estate Support Service staff.
- e) Inform residents in the event that a sample has returned a reading outside of normal parameters (see 6.2).

#### 3.0 Identification and Assessment of the Risk

- 3.1 Newcastle University premises and equipment are classified in one of three categories which are:
  - Category 1 High Risk
    Buildings or systems where a fluid category 5 may be present,
    e.g. Medical and Chemical Laboratories, Animal Holding
    Facilities. Farms etc.
  - Category 2 Medium Risk
    Buildings or systems where a fluid category 3 or 4 may be present, e.g. organic laboratories, multi-storey buildings containing pressurised heating systems etc.
  - Category 3 Low Risk
    Small buildings incorporating pressurised hot water systems.
    Domestic residences

### 3.2 Risk Assessment

Newcastle University will carry out a risk assessment of every building, the assessment will determine the category of risk each premises under the control of the university falls into.

Risk assessments will be reviewed every 5 years, or when there are:

Changes to the water system or its use;

Changes to the use of the building in which the water system is installed; The availability of new information about risks or control measures; The results of checks indicating that control measures are no longer effective; Water testing indicates that a system has become contaminated.

In new buildings, whoever designs, manufactures, imports or supplies water systems that may create a risk of contamination to drinking water supplies will:

- a) ensure that the water system is so designed and constructed that it will be safe and without risks to health when used at work; and
- b) provide adequate information for the user about the risk and measures necessary to ensure that the water systems will be safe and without risks to health when used at work

This will take the form of a risk assessment which will be provided at practical completion or handover.

## 4.0 Controlling and Monitoring the Risk

- 4.1 Newcastle University will employ suitably qualified and competent persons to design, install and maintain domestic water systems to ensure compliance with The Water Supply (Water Fittings) Regulations 1999.
- 4.2 Only members of the Water Industry Approved Plumbers Scheme (WIAPS) will be allowed to undertake installation or alteration of domestic water systems on university premises.
- 4.3 Only WIAPS approved Catering Equipment Installers will be allowed to install catering equipment to university systems.
- 4.4 Only WIAPS approved Water Cooler Installers will be allowed to install point if use drinking water coolers to university systems.
- 4.5 University schools, services and Institutions will ensure that departmental equipment connected to university systems fully comply with the requirements of The Water Supply (Water Fittings) Regulations 1999.
- 4.6 Prior to any alterations or additions to hot or cold domestic water systems the water supply undertaker will be informed, for large scale projects they should be invited to comment at an early design stage.
- 4.7 The person responsible for the work will ensure that all connections are being made to the correct system; this will be clarified using an appropriate test method.
- 4.8 The person responsible for the work will ensure that the legionella risk assessment is amended to show the change in asset status and that any existing drawings and schematics are updated.
- 4.9 The person responsible for the work will ensure that all redundant equipment and pipework is removed back to the nearest circulatory point.
- 4.10 The person responsible for the work will ensure that all pipework and outlets are appropriately labelled.

- 4.11 The person responsible for the work will ensure that a suitable method has been used to ensure system cleanliness prior to being put back into use. Certificates of testing and cleaning will be held in the project health and safety file or on the Building Information file whichever is appropriate.
- 4.12 The person responsible for the work will ensure that the asset details of any backflow prevention device or any other device which may require regular maintenance is passed to the Head of Maintenance. This will be in the form of a separate asset register and not as part of a project Health and Safety file.
- 4.13 Certificates of compliance with The Water Supply (Water Fittings) Regulations 1999 will be held in either the project Health or Safety file or on the building information file whichever is appropriate.

# 5.0 Training and Competence

- 5.1 All staff will receive training and instruction commensurate with their level of responsibility from accredited training providers.
- 5.2 It will be the duty of the Estate Support Health and Safety Advisor to identify the specific training needs of those members of Newcastle University who have duties under this policy.
- 5.2 The Duty Holders and Nominated Responsible Persons will receive further training in the role of the responsible person.
- 5.3 All training needs will be refreshed at regular intervals.

## 6.0 Monitoring and Maintenance Program and Procedures

## 6.1 Six Monthly

Inspect and record in an electronic data base the condition of all cold water storage tanks feeding domestic hot water and cold water services.

Inspect and record in an electronic data base the condition of all domestic hot water calorifiers.

### 6.1 **Annual**

Take samples from 1 drinking water outlet in each building recording where and when and carry out a drinking water quality analysis. A different outlet is to be tested each year.

# 6.1.6 Maintenance of Existing Risk Assessments and the Provision of New Risk Assessments

ESS will undertake to assess every building to ascertain its risk level.

Risk assessments will be reviewed every 5 years or if there is reason to believe they are no longer valid.

# 7.0 Emergency Management Procedures

- 7.1 In the event that a water system becomes contaminated or unsafe to use, ESS will isolate the system and undertake any works as required to ensure it becomes safe for use.
- 7.2 Building occupiers will be informed of the nature of the failure and any possible health concerns.

Steve Lynn Head of Maintenance 17. 12. 2012.