WATER SUPPLY AND DRAINAGE MANAGEMENT

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Date of Issue:	March 2015	**Next Review Date:**	April 2018
Version:	1.0	**Last Review Date:**	
Author:	Health and safety Manager		
Directorate:	Estates and Facilities Management		
Approval Route: Health and Safety Committee and the Infection Prevention Control Committee			
Approved By:		**Date Approved:**	
Health and Safety Committee		April 2015	
Links or overlaps with other procedures/policies:			
Health and Safety Policy			
Water Safety Policy			

Amendment History

Issue	Status	Date	Reason for Change	Authorised

Please note:

If you require a copy of this procedure in an alternative format (for example Large Print, Easy Read) or would like any assistance in relation to the content of this policy, please contact the Human Resources (HR) team on 01803 656680.

1.0 Purpose and Introduction

The Trusts are committed to protecting and improving the health, safety and well-being of patients, visitors, staff and the wider community, through responsible and effective management and development of the natural and built environment.

Water is a resource that is becoming increasingly scarce in the U.K. The treatment to make it safe for human consumption is costly; these costs are rising at a much higher rate than inflation. This procedure considers the use of water within the Trusts premises and sets standards for:

- The supply of water and the minimization of waste.
- The discharge of water into the drainage systems to minimise pollution.

It should be noted that this procedure is primarily concerned with water discharge systems as protection/integrity of water supply services upstream of the meter is provided by the Trusts Water Safety Policy.

This procedure applies to all properties currently owned or leased by the Trust and any future properties both owned and leased which must comply with the Trusts standards.

This Procedure has been prepared to:

- Enable the Trusts to set objectives and aims by which continuous improvement can be achieved
- Ensure compliance with all relevant legislation with regard to the delivery and discharge of water systems
- Provide adequate, appropriate and sufficient information to instruct and motivate employees to understand and undertake their role in water management
- Ensure that where possible suppliers of goods and services to the Trusts, and contractors, demonstrate an awareness of the importance of water management practices
- Promote communication regarding conservation measures both internally and externally
- Minimise the consumption of water, to meet, or exceed, the benchmark for NHS Hospitals

The Trusts will carry out inspections of potentially contaminating systems, such as, oil discharge points and oil tank bunds.

As part of the Trusts commitment to manage waste it will undertake regular waste management audits and these will include monitoring of chemicals discharged to drains.

The Estates & Facilities Management (EFM) will be responsible for minimising leakage of water supply systems aided by logging checks, meter readings, consumption checks and by benchmark comparisons i.e. NHS annual Estates Returns Information Collection (ERIC).

The Trust recognizes its legal obligation not to contaminate water systems and to comply with legal standards in its discharge to drainage systems.

The Trusts supplies of mains water and the sewerage discharge are the responsibility of the local water undertaking (South West Water Ltd) up to the meter (for the supply) and from the site boundary for sewerage services.

The Trust will liaise closely with the water supply company (South West Water), in respect of work on new and existing water systems in line with the current Water Bylaws.

1.0 Responsibilities

1.1 The Chief Executive Officers (CEO's)

The CEO's of the Trusts are the duty holders and have overall accountability for all aspects of water services.

1.2 Director of Estates & Commercial Development

The Director of Estates & Commercial Development has the overall responsibility for the EFM department and will monitor the management of this procedure.

1.3 The Head of Estates

The Head of Estates or, in their absence, the Deputy, is responsible for the overall management and implementation of this procedure and will ensure that this Procedure is complied with regard future development of the site, particularly with reference to new technologies and the need to provide adequate records of new installations.

1.4 The Trust Environmental Services Manager

Has the responsibility for advising the EFM department on the most appropriate methods for the disposal of arisings from drain cleaning operations and ensuring that all the appropriate documentation relating to the disposal process is kept in the Trust's Site Waste Register.

Will seek advice from the water company to comply with all consents and license conditions in respect of discharges to drainage systems which are highlighted in HTM 07-01 (waste removal maceration).

1.5 EFM Managers/Supervisors

Are responsible for the maintenance of the water and drainage services. They must ensure that the services are operated safely and efficiently in accordance with the guidelines described in this policy. They will employ and train members of the estates staff to be approved plumbers under the Water Industry "Approved Plumbers Scheme". This will have the advantage of exemption of the notification procedure required by the water service provider for alteration/installation of water systems.

All persons working on drains will be advised of the nature of hazards, staff be provided with, and trained in the use of personal protective clothing (PPE), and have received Risk Assessment training. Where there is potential for harm whilst working on a drain, a permit to work must be issued.

They will ensure all staff who work on drainage systems are to be offered immunized against and hepatitis A & B. The Occupational Health Department will advise and arrange the vaccinations.

1.6 Radiological Protection Advisor

Has the appropriate Discharge Consents from the Environment Agency for the discharge of Radioactive Waste to Drain; this is renewable on an annual basis by the Trusts Radiological Protection Advisor who is responsible for the radiological protection of the Trust.

1.7 Contractors

All contractors will comply with the Trusts Health and Safety Policy and the Operational Policies/Procedures of the EFM department.

All contractors will be registered on the Trusts Approved List of Contractors.

It is the responsibility of the contractors employer to ensure that their staff are appropriately immunized for tetanus and hepatitis A & B (refer to Occupational Health for advice).

A maintenance engineer working on the service must be informed of the possible hazards, permit to work procedure and the spillage procedure before commencement of any task.

All contractors working on water systems who are employed by the Trusts should have staff trained as Approved Plumbers.

2.0 Procedures

These procedures use the Health Technical Memorandum HTM 07-04 Water Management and Water efficiency as a reference for compliance with legislation and to maintain Standards for better Health C20a - To promote effective care and optimize health outcomes by being a safe and secure environment.

2.1 Risk Assessments & Permits to Work (PTW)

The Trusts have a duty of care to carry out risk assessments to see if exposure can be avoided, if it cannot, to provide control measures, safe systems of work and training which will minimise risk.

A PTW will be issued where there is a high risk following information gained regarding known or potential hazard in the area to the operative working on the system (chemicals, cytotoxic drugs)

The purpose of the PTW is to ensure that any work being undertaken on a water or drainage system is under the supervision of a competent manager, that the operatives are suitably trained and have the necessary equipment and understanding.

A copy of the PTW will be retained by the operatives working on the system for the duration of the activity, and signed off after completion.

The manager/supervisor issuing the permit will retain a copy of the PTW for a minimum of five years.

Before entry to any confined space (manholes, chambers or sumps) refer to the Confined Spaces Operational Policy and the associated PTW.

2.2 Drain Clearance

This refers to the clearance of internal/external drains, waste outlets, toilets and sluices. The Trust will employ a drain cleaning contractor annually to clean roadway gullies to mitigate flooding risk.

When working on drainage systems, both externally and internally, contractors/estates staff, should where possible liaise with the local staff to ascertain if the origin of the system is known, to establish likely contaminants in the affected drain.

The correct equipment must be used when lifting manhole covers.

Ensure a first aid kit and eyewash station are readily available.

If access is required into manholes, chambers or sumps, the Trusts Management of Confined Spaces procedure will apply; reference should be made to its PTW requirements.

In all cases appropriate personal protective equipment (PPE) will be worn, i.e. gloves, facemask, goggles, disposable overalls and overshoes. Following the work the, equipment must be decontaminated or disposed of as hazardous waste. The Environmental Services Managers advice should be sought as to the most appropriate method of disposal.

In addition to the above, access into manholes, chambers or sumps will require specific precautions regarding gas testing and breathing apparatus, refer to Confined Space Policy.

The area affected must be made safe prior to the activity and suitable barriers and warning signs erected.

Initially, hand operated equipment must be used before using mechanical clearing equipment is used to avoid the production of aerosols.

Any cuts or abrasions sustained during the course of the work should be cleaned, covered and treated immediately, and an incident report completed.

Following completion of the work, the area is to be left clean using absorbent materials and a suitable decontaminant, advise should besought from the Environmental Manager as to the most appropriate methods for the disposal of arisings from drain cleaning operations.

Decontaminate all maintenance equipment after use (sodium hypochlorite solution), or where appropriate use disinfection wipes.

Always wash hands thoroughly after any work on drainage systems.

Note: Sodium Hypochlorite solutions can be used to reduce the risk of contamination.

2.3 Containment of contaminated fluids and their disposal:

The Trusts shall ensure that the bunds to the fuel storage facilities comply with the Control of Pollution (Oil Storage) Regulations 2001.

The Trusts are to ensure that where bunds are open to the elements, that drainage filtering/separation facilities are in place and regularly maintained to avoid spillage. Copies of Hazardous Waste transfer notes (HTNs) relating to the disposal of arisings or contaminated fluids should be forwarded to the Trust's Environmental Services Manager for inclusion in the Site Waste Register.

Where pipework drainage systems are used, i.e. compressed air/vacuum pipelines (manual or automatic), the emulsified liquids must be retained and disposed of appropriately. Contracts for the maintenance of automatic systems should include a clause regarding the removal and safe disposal of the waste filters. Copies of HTNs notes relating to the disposal of arisings or contaminated fluids should be forwarded to the Trust's Environmental Services Manager for inclusion in the Site Waste Register.

To comply with the Control of Pollution Regulation, the Trusts have a water separator/underground storage tank for its vehicle washing facility; the Trust will use a specialist contractor annually to remove the separated contaminants. Copies of HTNs relating to the disposal of arisings or contaminated fluids should be forwarded to the Trust's Environmental Services Manager for inclusion in the Site Waste Register.

The Trust will comply with the Control of Pollution Regulations and avoid contamination of ground water by rain water run-off from areas holding sources of possible contamination.

2.4 Procedure for spillages which could contaminate water systems or ground water;

For small spillage of liquids the EFM Department retains proprietary Spill Kits, to absorb the liquid; PPE will be used when dealing with any spillage of liquids. Copies of HTNs relating to the disposal of arisings or contaminated fluids should be forwarded to the Trust's Environmental Services Manager for inclusion in the Site Waste Register.

Minor spillage will be cleaned by the operative carrying out the task, or by the appropriate person upon discovery.

Should a major spillage occur internally, then the hotel services department will be contacted for their assistance. Spillage of any nature external to the building should be reported to the Environmental Services Manager.

Any spillage which could have, or has, affected staff, patients, visitors, services, etc should be reported via the Incident Reporting System

Major spillage of fluids would require the assistance of specialist contractors, the emergency services and the environment agency.

2.5 Maintenance of Records:

The EFM department is responsible for maintaining site services records for water and drainage services, all modifications to site and main routes within building are to be reported to the estates department to enable existing drawings to be updated.

Records of the cleaning of drainage tanks and separators will be kept at the estates department, hazardous waste consignment notes are to be maintained by the Environmental Services Manager.

2.6 Adopting Best Practice

The Trusts recognize that achieving good water management will demand a combination of integrating water management into new builds and ensure changes in existing buildings do not have negative impacts.

The Trusts should, via the Capital Projects team, in its new projects investigate the inclusion of new technologies such as:

- Boreholes/private supplies
- Rainwater Harvesting
- Grey water reuse
- Toilet flush controls

Sub-metering of water supplies in new developments is a requirement under the building regulations; they should be linked to the building management system to enable continuous logging of the service.

The annual water consumption at Torbay Hospital exceeds the SWW threshold for Large user status i.e. 50,000 m3 per annum, as such the trust has an annual contract Agreement for the Provision of a Supply of Water and Sewerage Services.

The contract provides an advantageous unit price for both water and sewerage tariffs for consumptions over the threshold of 50,000 m3. The contract is signed and held at the EFM Department.

SWW make available a range of services to the Trust which include: Business Accounts on-line, logging data, emergency planning and advice regarding water conservation.

The large user status does allow the trust to seek supply from other water undertaking if the linking infrastructure is available.

2.7 Procurement of Equipment, Plant and materials connected to the water system

All equipment/components purchased to be connected to the Trusts water and drainage systems are to be listed as WRc Approved.

These include such items as:

- Washing machines
- Equipment washers
- Vending machines
- Disposal units
- Ice making machines

The Trusts Procurement Departments shall be responsible for ensuring that equipment purchased is compliant with the WRc approved list, information and advice should be sought from the EFM department.

No equipment shall be brought into the Trusts and connected to the water and drainage services without the approval of the EFM department, failure to do so, could, in the event of a pollution/contamination incident lead to prosecution.

The EFM department will provide the Trust Finance Department with accurate and timely monthly financial information regarding costs for water and sewerage services. It will also provide look forward costs for financial planning.

The EFM department will read water meters monthly, to monitor consumptions/leaks and maintain records of consumption on a database for reporting purposes and provide cost/consumption information to populate the annual Estates Return Information Collection (ERIC) and use information from ERIC to benchmark water utilization.

2.8 Emergency Procedures:

In the event of an incident of any of the following the Director of Estates & Commercial Development will be informed and will advise the Emergency Planning Team. Directorates/Departments should follow their action plans/cards in the Trusts Business Continuity Plan. The following are examples of an emergency:

- Contamination of the Mains water supply
- Disruption/Loss of the Mains water supply
- Flooding, likely to disrupt other services
- Serious disruption of drainage services

2.9 Sources of Contamination of Water Services

- Sewage to mains:
  - replacing w.c.
  - replacing basin/sink/bath/macerator etc.
  - service duct (drains/sewage) (flooded duct)
- Use of dirty tools on mains:
  - use of same tools (sewers - mains)
  - use of same tools (basin/sink/bath/macerator)
  - contaminated equipment repair

- Personal hygiene - diarrhoea gastro-enteritis, infectious diseases
- Unclean materials
- Dead legs
- Inadequate air breaks
- Contaminated backflows

2.10 Table of Red List Chemicals

The following chemicals must not be discharged to sewer:

Mercury and its compounds	Simazine
DDT	Trifuralin
Hexachlorobutadiene	Malathion
Endrin	Gamma-Hexachorocychexane
Dichlorvos	Hexachlorobenzene
Atrazine	Dielrin
Triphenyltin Compounds	Polychlorinated Biphenyls
Azinphos Mehtyl	Trichlorobenzene
Cadmium and its Compounds	Tributyltin Compounds
Pentachlorophenol	Fenitrothion
Aldrin	Endsulfan
1,2-Dichloroethane	All flammable and water immiscible substances