



A Division of NCH Ireland Ltd.
Unit 10 Brookville Business Park, Ardee Road, Dundalk, Co. Louth
Telephone: 042 939 5506 Facsimile: 042 939 5501

Water Hygiene - Legionella and E.Coli Bacteria

As is detailed in NDSC (HPSC) Management of Legionnaires Disease in Ireland and UK HSE L8, the Legionella Bacteria can be found in systems operating at between 20oC and 60oC.

Irish legislation the Safety, Health and Welfare at Work (Biological Agents) regulations listed both the Legionella and E.Coli Bacteria. Both were classified as class 2 organisms i.e. they could result in a health risk to people. These regulations also point out that it is the duty of every employer / owner to assess the risk from Biological agents such as the Legionella and E.Coli bacteria and to take the appropriate action to minimise that risk.

In the case of Apartment Blocks & high density dwellings there is a considerable risk from contaminated water systems. Low numbers of bacteria can migrate into man made systems where they will happily proliferate in the conditions provided. Large reservoirs of water in plant rooms where water use is irregular can in fact provide ideal conditions for bacteriological proliferation. Unoccupied dwellings / units can allow for water to stagnate over long periods resulting in bacteria growth. Systems can be colonized as bacteria migrate from such a source.

Legionnaires disease is usually contracted by inhaling an aerosol containing the Legionella bacteria – e.g from a shower. Aerosols can however be formed when washing also and therefore precautions should be taken to reduce the risk. With this in mind areas of concern will include the following:

- Tanks, Calorifiers and Sinks / showers – Legionella mainly
- Cold water taps – E.Coli mainly



A Division of NCH Ireland Ltd.
Unit 10 Brookville Business Park, Ardee Road, Dundalk, Co. Louth
Telephone: 042 939 5506 Facsimile: 042 939 5501

PROPOSALS

The majority of Apartment developments will take water supply direct from local authority mains. This supply will be piped to a break / booster tank or reservoir local to the apartments. This tank supply will be pumped to end users as and when required.

Depending on the quality of the mains water these tanks can become rather dirty in a short space of time. Dirt and debris in the right conditions will provide a nutrient source for bacteria growth. With this in mind we recommend the water storage tanks are cleaned and disinfected on an annual basis. On installation / commissioning all associated down service will have been flushed and disinfected. We propose to use a potable grade disinfectant which will remain in the system for a short time at low levels after the tank disinfection. This will offer further protection and increase the effectiveness of the procedure.

Building owners / end users will be advised of intended works – time of day / duration. On arrival at site tank in question will be isolated. Water will not be available for use and where outlets are opened there will be a risk of air-locking etc. The tank water will be pumped to drain using submersible pumps. Industrial wet vacuums and if necessary pressure washers will be utilized to clean internal surfaces. The tanks will be refilled with fresh mains water and sanosil disinfectant. Analysis will be completed on site to measure disinfectant levels to ensure all wetted surfaces are satisfactorily disinfected. On completion the tank will be returned to normal service with a residual of treatment present. During normal operation this treated water will be drawn to end user points in so doing offering a safe level of disinfection as it goes. Please see proposed Method Statement attached.



A Division of NCH Ireland Ltd.
Unit 10 Brookville Business Park, Ardee Road, Dundalk, Co. Louth
Telephone: 042 939 5506 Facsimile: 042 939 5501

Technical Quotation

Custom House Square

Clean and disinfection of 9 x water storage tanks -----€4200

Loreto Abbey Apartments

Clean and disinfection of 2 x water storage tanks ----- €1600

Mount St Annes

Clean and disinfection of 5 x water storage tanks ---- €3000

Adamstown

Clean and disinfection of 2 x water storage tanks ----- €800

NOTE: Charges above are discounted and based on receiving all works.

Tank Clean and Disinfection proposed charges

- Up to and including 5,000 litre tanks ----- €700
- 5,000 to 10,000 litre tank ----- €900
- 10,000 to 15,000 litre tank ----- €1050

SUBJECT TO CHEMAQUA STANDARD TERMS & CONDITIONS



A Division of NCH Ireland Ltd.
Unit 10 Brookville Business Park, Ardee Road, Dundalk, Co. Louth
Telephone: 042 939 5506 Facsimile: 042 939 5501

Support Services

Our support services include for the following:

- Comprehensive and extensive range of services and treatments to provide for all your water treatment needs.
- Supply of all chemicals as detailed for the treatment of each system with all products being manufactured to ISO 9001 standard. Full MSDS provided.
- Delivery of treatment to site where applicable.
- Full laboratory and technical support as required.
- FOC survey on heating and chilled systems with full report on findings.
- Cleaning and Sterilisation of systems as detailed with full certification.
- Collection of samples for Legionella analysis in sterile containers, transport to lab with full reports and recommendations on completion of tests.
- Collection of samples for E.coli and TVC analysis in sterile containers, transport to lab with full reports and recommendations on completion of tests.
- Our large R&D labs allow us to provide advice on latest chemical and non-chemical treatment approaches.
- All our products and services can be included in one overall fixed price water treatment Service Contract.