

BIOFILM SAMPLING AND ANALYSIS

Introduction

Biofilms are a collection of microorganisms in which cells stick to each other and can form on wetted surfaces within potable water system. The greatest risk from these biofilms is that they can create hideout for pathogens. In order to control potable water systems effectively, it is often considered that biofilm control is a useful tool. Within domestic systems there are a number of control measures employed to minimise the development and proliferation of biofilms, however biofilm monitoring, in order to conclude the effectiveness of controls is less common.

Biofilm Sampling

Within any sampling protocol it is appropriate to sample a representative part of the system. Biofilm sample points could be within supply lines, hot and cold storage tanks or within the distribution network. The more accessible the point the simpler the monitoring will be.

A shower head or other suitable outlet is considered an effective point to sample for any biofilm growth. This can be done directly from the point itself or if present, for a more quantitative arrangement, from an existing adaptor or standard connection.

A simple swabbing process is all that is required in collecting the sample. For a quantitative as well as a qualitative sample, a predetermined repeatable swabbing method is preferred.

Biofilm Analysis

On collection of the sample there are various types of analysis available. This can include analysis for specific pathogens or simply to determine whether a biofilm is present and if so whether it is increasing or decreasing in volume.

If you require any further information regarding the above, please contact the CCS Team at sampling@owmgroupp.com or call 01224 766641.

