Document Number:	**SASoM/EQUIP/058.v2**
Title:	**Water Quality Check for ELGA Water Purification System**
Version:	**v2**
Author:	**Peter Mullen**

Effective from:	20/08/2018
Valid to:	19/08/2023

SOP History		
Number	Date	Reason for Change
v1	20/08/2013	Original
V2	20/08/2018	Update

1.0 Purpose –

This SOP describes the current procedure for monitoring the water quality of the 'ELGA' water purification system within Laboratory 248 at the St Andrews School of Medicine (SASoM).

2.0 Scope –

This SOP applies specifically to staff in the SASoM monitoring the 'ELGA' water purification system within Laboratory 248.

3.0 Responsibilities –

All staff involved in monitoring the 'ELGA' water system are responsible for ensuring that the methods are followed in accordance with this SOP.

All staff must have read and signed the relevant risk assessment documents before performing this procedure.

4.0 Procedure –

There are 4 water supplies within Laboratory 248, namely (i) the hand wash sinks located at laboratory exits, (ii) general tap water at laboratory sinks to be used for washing or rinsing of equipment and glassware, (iii) Milli-Q Water – premium quality water dispensed from its own (blue) filtration unit, and (iv) ELGA water – the green tap situated above laboratory sinks - this water has been passed through the Central ELGA water filtration system and is of a quality suitable for the majority of laboratory solutions and buffers etc.

The ELGA purification system is contained in a service cupboard opposite the locker bank in the corridor outside the Level 2 Chemistry Teaching Laboratory.

Using the service key available from either Peter Mullen or Mike Fearon, open the appropriate service cupboard door (5th door from the right hand side). Carefully step over the small step and turn to face the apparatus on the right hand side.

The display shows three different screens which scroll automatically in sequence. The current time is always displayed in the top left hand corner of the screen (eg 14:43:05). The three screens are as follows:

1. Purity (eg 18.2MΩ) : Temp (eg 26.4°c)
2. Reservoir Volume (eg 335L) : Flow rate (eg 09.1L/min)
3. Pressure (eg 0.03bar) : Flow Rate (eg 09.1L/min)

Check the purity of the water – it should ALWAYS read approximately 18MΩ. Note the reading and enter on the chart attached to the apparatus, along with the date. This visual check should be performed WEEKLY.

If the quality of the water is not acceptable (ie 18.2MΩ or less), advise either Mike Fearon (mf42@st-andrews.ac.uk) or Peter Mullen (pm72@st-andrews.ac.uk) who will then contact a service engineer.

Assuming the purity of the water is satisfactory, close and lock the service access door.

The ELGA water purification System should be serviced annually by a competent engineer.

5.0 Personal protection –

A Howie coat must be worn at all times when working in laboratory.

6.0 Spillages –

Mop up any water spillage immediately with mop and bucket located in Autoclave Room (248N)

Ensure any floor area where water was spilled has yellow warning board placed at area until it dries.

7.0 Related documents –

7.1 Risk assessments – RA/GEN/009

8.0 Approval and sign off –

Author:

Name: Peter Mullen

Position: Research Fellow.

Signature: Date:

Management Approval:

Name: Mike Fearon

Position: SOP Administrator

Signature: Date:

QA release by:

Name: Alex MacLellan

Position: QA Manager

Signature: Date:

STANDARD OPERATING PROCEDURE

Please sign below to indicate you have read this S.O.P and understand the procedures involved.

NAME	POSITION HELD	SIGNATURE	DATE