Safety Documentation

Please select the forms you require by selecting the check boxes below.
You can select more than one.

☑ **Method Statement** ☑ **Risk Assessment** ☐ **Chemicals COSHH**

Once you have made your selections, scroll down and complete the forms.

Buttons: [+] will add a row to a list [X] will delete a row from a list

You may save this file to a local drive at any time.
When you have finished, save the file to a local drive and email it to your supervisor for authorisation.

Supervisors - There is a sign-off section at the end of the document set that must be completed.

Staff may "self authorise", (as a supervisor), but the forms must still be submitted to the DSO for approval.

IMPORTANT:

YOU ***MUST NOT*** START ANY PRACTICAL WORK UNTIL THESE FORMS HAVE BEEN RETURNED TO YOU WITH **BOTH** YOUR SUPERVISOR's AND DSO's APPROVAL SIGNATURES ATTACHED.

Please complete these fields

School or Service	Wolfson School of Mechanical, Electrical and Manufacturing Engineering
Department	CBE
Originator name	Jon Harriman
email address	j.harriman@lboro.ac.uk
Location	H21/22
Project / Activity / Task	Use of xCELLigence RTCA SP
Supervisor Name	Prof R J Thomas

Version : 2.33

Loughborough University
CBE

Safety Method Statement

Reference: SAF/MEME/7746

Location: H21/22

Originator: Jon Harriman

Project / Activity / Task: Use of xCELLigence RTCA SP

What equipment will be used in this activity?

xCELLigene RTCA SP

What training must be completed to do this activity?

General lab induction. In house training on xCELLigence RTCA SP SOP.

What chemicals are being used? (These must be included in the COSHH Form)

None

Spill and accident procedures.

Immediately wipe small spillages with a paper towel and disinfectant spray- Refer to COSHH CBE 334 MEME 654 1:50 Chemgene

Procedure in the event of an emergency. (How to leave the process in a safe condition in such an event)

In the event of an emergency, leave the equipment and samples immediately and follow safety procedures e.g. evacuation.

References.

Detailed sequential description of the process

Process step	Precautionary measures and comments
Place plate reader into incubator at standard cell culture settings and allow temperature to equilibrate. Wipe away any condensation with paper towel. Feed power cable through the equipment port in the back of the incubator and reseal.	Connect power cable prior to placing the plate reader in the humid environment of the incubator. Otherwise ensure any condensation is cleaned before connecting the power. Ensure that the equipment port is properly resealed to prevent CO2 leak into laboratory. Refer to COSHH MEME 538 (CO2), CBE 171 SAFMM6550 Use and Maintenance of Sanyo and Panasonic Incubators.
Turn on plate reader and connect to accompanying lap top with RTCA software.	Ensure power connections are secure and that there is no damage to connectors or cable.
Set up plate experiment as desired.	Any chemicals, GMOs or biological agents used in the individual experiment should be separately risk assessed and cross referenced with this general equipment risk assessment.
Unlock plate clamp and insert plate. Replace plate clamp and check connection.	Ensure plate is in the correct position and do not allow finger tips to be trapped when closing the clamp.
Close incubator and run experiment set up as desired.	
At end of experiment, remove plate and dispose to orange stream waste.	Check risk assessments of any biological agents or chemicals used during assay for alternative disposal arrangements.

Safety Method Statement (Continued)

Process step	Precautionary measures and comments	+
		x
		x
		x
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		x
		x
		x
		x

Loughborough University
CBE

Risk Assessment

Reference: SAF/MEME/7746

Location: H21/22

Originator: Jon Harriman

Project / Activity / Task: Use of xCELLigence RTCA SP

Is this process risk assessment for a : ☑ Laboratory / Workshop ○ General use

Category 1: Machinery & work equipment:				
Design and Construction	Mechanical hazards	Electrical hazards	Radiation hazards	+
N/A	Crushing	Indirect contact	N/A	x
Category 2: Workplace				+
Risk of asphixiation (Oxygen depetion)				x
Category 3: Hazardous and/or Harmful substances				+
Biological substancees (Infection)				x
Category 4: Work activity				+
				x
Category 5: Work organisation				+
N/A				x

Explain the risks associated with these hazards

People / Groups at risk: Operator only — x

Enter risk details here:-	Impact	Probability	Risk Score
Trapped finger in plate clamp.	Slightly Harmful	Highly Unlikely	

What are the control measures?	Lowers Impact	Lowers Probability	+
Ensure proper care and attention is used when closing plate clamp. Ensure plate is correctly positioned in tray.	Significantly	Significantly	x

Residual Risk: Low

People / Groups at risk: Operator only — x

Enter risk details here:-	Impact	Probability	Risk Score
Biological spill - Small volume	Slightly Harmful	Highly Unlikely	

What are the control measures?	Lowers Impact	Lowers Probability	+
Clean any spill immediately with paper towel and disinfectant solution Refer to COSHH CBE 334 MEME 654 1:50 Chemgene	Significantly	Significantly	x

Process Risk Assessment Form (Continued)

			Residual Risk	Low
People / Groups at risk	Everyone in the room			x
Enter risk details here:-		Impact	Probability	Risk Score
CO2 leak from improperly sealed equipment port.		Harmful	Highly Unlikely	Low
What are the control measures?		Lowers Impact	Lowers Probability	+
Ensure equipment port is properly sealed with provided rubber bung and / or parafilm. Use leak detector spray to check for leaks after equipment set up. Place oxygen monitor nearby to equipment to alert lab users of potential drop in oxygen content in the room. Ensure air handling is running normally before working the the laboratory. Refer to COSHH MEME 538 for CO2. Refer to CBE 171 SAFMM6550 Use and Maintenance of Sanyo and Panasonic Incubators.		Significantly	Significantly	x
			Residual Risk	Low

+ Add another Risk

Who may be at risk as a result of this activity?

Personnel Group	Maximum (Task setup/ Re-configuration)	High (Performing the task)	Medium (Observing the task)	Low (Present, but not involved)	Lone Working (Out of hours)	No Exposure Permitted	Total
Academic Staff	0	0	0	0	0	0	0
Technical Staff	0	1	0	0	0	0	1
Research Staff (PDRA)	0	1	0	0	0	0	1
Research Students (PhD)	0	0	0	0	0	0	0
Students (Undergraduate / MSc)	0	0	0	0	0	0	0
Visitors	0	0	0	0	0	0	0
Others - Over-type as needed	0	0	0	0	0	0	0
Total	0	2	0	0	0	0	2

With these controls in place, the risk is:

Process Risk Assessment Form (Continued)

The activity is LOW RISK - and is effectively controlled

Supervisor and Departmental Safety Office (DSO) Sign-off.

Supervisors

Please check the documents above and if you want to approve them:

1) Electronically sign this document
2) Save it to a local drive (You will be prompted to do this)
3) eMail the signed document to the DSO.

DSO

Please review the documents above and if you want to approve them:

1) Enter the reference numbers as appropriate
2) Electronically sign this document
3) Save it to a local drive (You will be prompted to do this)
3) eMail the signed document to the originator

IF YOU DO NOT WANT TO AUTHORISE THE FORMS,

Please do not sign the form, but click the "Not Approved" check-box and return it to the originator by email stating why and what you expect them to do to put it right in the comments box below.

Not Approved ☐

Supervisors Signature: Carolyn Kavanagh — Digitally signed by Carolyn Kavanagh Date: 2023.06.19 14:08:28 +01'00'

Form Reference Numbers

Risk Assessment	Method Statement	COSHH Assessment
SAF/MEME/7746	SAF/MEME/7746	

DSO Signature: Keven G Smith — Digitally signed by Keven G Smith Date: 2023.10.10 10:51:24 +01'00'

This document set must be reviewed and re-approved at the following times:

1) After the first occurrence of the activity described above (Review only)
2) After any change to the procedure or reagents used
3) After any incident resulting from this activity
4) At least annually from the date of approval

Next Review: 10 Oct 2024

Review comments