RISK ASSESSMENT FORM FOR SAMHE ACTIVITIES

Section 1: Assessment Overview

Version Control	2.0

Name of Assessor	Henry Burridge	**Approver**	Graham Hughes
Full description of the activity	The Schools' Air quality Monitoring for Health and Education project, SAMHE, will establish a school-based air quality monitor network which is representative of the UK's schools and through the network record measurements of carbon dioxide to evaluate classroom ventilation levels. In order to do so the project will send and gift air quality monitors to UK schools who request them via an online registration form. This study was given favourable opinion by the Science, Engineering and Technology Research Ethics Committee (SETREC) and approval by Washington Ochieng, Head of Department (Civil and Environmental Engineering, Imperial College London). The monitor request form and surrounding process was given approval by Washington Ochieng, Head of Department (Civil and Environmental Engineering, Imperial College London) and the Research Governance and Integrity Team (RGIT) at Imperial College London.		
Location	Schools, primary and secondary, across the UK.		

Section 2: Persons Affected

Who might be affected by this work?	Pupils, teachers, other school staff	**How many people are affected?**	Staff and pupils from up to 3000 schools

Section 3: Review

Date for Next Review of this Document	Date Document Reviewed	Reviewed by (print name)	Signature
07/04/2023			

Section 4: Risk Assessment

Risk Matrix

To find the risk score decide how severe (S) you think an outcome will be (minor to fatal) and note the score. Then decide on the probability (P) of it occurring (very unlikely to likely) and enter these in the risk assessment drop down boxes. A risk score will then be calculated. The raw risk will probably be high, but after you have considered the existing controls, the residual risk should fall. Any coloured residual risk level is usually unacceptable, and more controls will be needed. In some cases, e.g. if it's red, immediate action will be necessary.

RISK LEVEL	
Low	1,2,3
Medium	4,6
High	8,9
Very High	12,16

RISK SCORE = S x P		SEVERITY OF OUTCOMES (S)			
		Minor	**Serious**	**Major**	**Fatal**
PROBABILITY (P)	**Very unlikely**	**1**	**2**	**3**	**4**
	Unlikely	**2**	**4**	**6**	**8**
	Possible	**3**	**6**	**9**	**12**
	Likely	**4**	**8**	**12**	**16**

SEVERITY (S)		
Category	**Examples**	**Score**
MINOR	Superficial injuries – cuts, bruises, mild skin irritation, mild aches and pains – requiring first aid only. Minor property damage.	1
SERIOUS	More serious injuries or ill-health, requiring time off work or study or a hospital visit, e.g. burns, sprains, strains and short-term musculoskeletal disorders, cuts requiring stitches, back injuries, fractures to fingers or toes. More serious property damage	2
MAJOR	Broken limbs, amputations, long-term health problems resulting from work, or acute illness requiring medical treatment, loss of consciousness, serious electric shock, loss of sight. Major property damage.	3
FATAL	Injury or ill-health which leads to death either at the time or soon after the incident, or eventually, as in the case of certain occupational diseases, such as asbestos-related cancers.	4

PROBABILITY (P) - The likelihood of a safety event happening.		
Category	**Examples (for guidance only – some or all may apply for each category).**	**Score**
VERY UNLIKELY	Good control measures are in place. Control measures do not rely on a person using them (I.e. personal compliance). Controls are very unlikely to break down. People are very rarely in this area or rarely engage in this activity.	1
UNLIKELY	Reasonable control measures are in place but they do rely on a person using them (some room for human error). People are not often in this area / do not often engage in this activity / this situation is unlikely.	2
POSSIBLE	Inadequate controls are in place, or likely to break down if not maintained. Controls rely on personal compliance. People are sometimes in this area or sometimes engage in this activity / this situation sometimes arises.	3
LIKELY	Poor or no controls in place. Heavy reliance on personal compliance (lots of room for human error). People are not often in this area / engage in this activity on a regular basis / this situation often arises.	4

No.	**Description of Hazard**	**Raw risk (with no control measures)**			**Controls**	**Residual risk (control measures in place)**		
		Raw Severity (S)	**Raw probability (P)**	**Raw risk (S x P)**		**Residual Severity (S)**	**Residual probability (P)**	**Residual risk (S x P)**
1	Risk of mild electrocution - the devices are powered by a 5V DC supply at 1.0-2.4 amps; giving a power draw of 5-12 watts	2	4	**8**	Standard Operating Procedures (SOP) details appropriate procedures including the order in which devices are plugged and switched, and details like keeping hands clean and dry.	2	1	**2**

2	Trip hazard - the air quality monitor's cable provides a potential trip hazard.	2	4	**8**	SOP details that care with the cable positioning must be taken when setting up and when moving the device.	2	1	**2**
3	Injury due to the resulting activities	2	4	**8**	SOP details guidance to avoid any excessive activity and to ensure awareness of surroundings and the movement of others.	2	1	**2**
4	Monitor falling off the wall	**2**	**3**	**6**	SOP details guidance relating to monitor placement. Recommended that SAMHE monitors are placed vertically on a flat surface away from its edges. Some models include two plastic bases, which can be used to stabilise the monitor. If schools elect to attach the monitor to a wall SOP details suggested safe ways of doing so. If wall mounted, monitor locations should take into consideration, and so far as possible avoid, risk of monitor falling and causing injury.	**2**	**1**	**2**

Section 5: Assessment Sign-Off

Assessor's Signature		**Position**	Senior Lecturer in Fluid Mechanics, Department of Civil and Environmental Engineering, Imperial College London.
Print Name	Henry Burridge	**Date**	**21st June 2022**
Additional Comments			