UQBR SOP 49 Testing and Use of Emergency Showers/Eyewash Stations and Gas Cylinders

REQUIREMENT:

- 1. To ensure that the requirements and regulations as set out by the following are met as far as practicable:
 - AEU UQ
 - The Code
 - OGTR
 - Department of Agriculture and Fisheries (DAF)
 - QLD Workplace Health and Safety, and
 - UQ OH&S
- 2. To standardise practice for all UQBR staff and researchers within UQBR facilities.
- 3. Annual review is required to maintain best practice and usability of this SOP.

RESPONSIBILITY:

It is the responsibility of the individual performing animal handling procedures and techniques to ensure they have been assessed as competent.

Please Note:

This UQ Biological Resources (UQBR) SOP expands upon UQ Animal Ethics Unit SOPs. This document outlines the procedures followed by UQBR and should not be referenced in Animal Ethics Applications.

No changes or deviations from this SOP are to occur unless the Director of UQBR gives prior authorisation.

NB: The use of (*) indicates this statement is dependent on the facility procedures

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OBJECTIVE:

To describe the method of testing and use of emergency Showers and Eyewash Stations within UQBR facilities.

I. EQUIPMENT

• Safety Shower Test Bin / Collection apparatus

II. PREPARATION OF EQUIPMENT

- 1. Gather equipment items
- 2. Ensure bin for water collection is calibrated in Litres
- 3. Rest the water bin on a trolley to allow for easy movement once filled with water

III. PROCEDURE

Testing of Emergency Shower

- 1. Position test bin below shower head, ensuring drain tap of the collection bin is closed
- 2. Elevate bin sock so that shower head is enclosed by the sides of the bin/sock
- 3. Lock castors on the trolley
- 4. Pull the shower handle to allow water to run for 15 seconds
- 5. Pull shower handle to stop water flow
- 6. Check the amount of water collected
- 7. Calculate flow of safety shower
 - a. Amount of water (L)
 - 75.7L / 4 = 18.9 Liters of water or more should be captures in 15 seconds
 - b. If volume collected equals or exceeds this the shower is compliant
 - c. If volume collected is less than this alert supervisor or manager
- 8. Wipe shower head and check for leaks,
- 9. Place a wet floor sign on the floor and remove once the floor is dry
- 10. Move collected water to a sink for disposal
- 11. Update Emergency Shower Testing records

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Use of Emergency Shower

- 1. Pull the shower handle to turn on water
- 2. Immediately flush the affected area for 15 minutes take care to avoid inadvertent splash into the eyes
- 3. Remove contaminated clothing, jewelry and shoes. Do not let modesty slow this process
- 4. Seek medical attention immediately

After Emergency Shower Use

- 5. Call security Emergencies (Life threatening 334-5333) or Non-Emergency (Non-Life threatening 334-51234), alternatively go directly to the local on-campus health services at Level 1, Gordon Greenwood Building (Bldg #32).
- 6. Ensure the safety Data Sheet for the chemical is taken to the health services
- 7. Report the injury or exposure using the UQ Incident Reporting Database

Considerations:

- Use the emergency shower immediately if your skin is exposed to a hazardous chemical
- Do not hesitate to use the safety shower, the first few seconds after exposure to a hazardous chemical (e.g. corrosive chemicals) are critical to decrease tissue damage
- There may not be a drain near the emergency shower, this is not important in the event the emergency shower needs to be used

Testing of Emergency Eyewash Stations

- 1. Position safety shower test bin below eye wash station
- 2. Ensuring eyewash caps are open
- 3. Push the eyewash handle and allow water to run for 15 seconds
- 4. Pull eye wash handle to stop water flow
- 5. Check the amount of water collected
- 6. Calculate flow of safety shower
 - a. Amount of water (L)
 - 1.5L/4 = 0.38 Liters of water or more should be captured in 15 seconds
 - a. If volume collected equals or exceeds this water level eyewash is compliant
 - b. If volume collected is less than this alert supervisor or manager
- 7. Wipe eyewash station dry and check for leaks
- 8. Place a wet floor sign on the floor for collection once the floor is dry
- 9. Move collected water to a sink for disposal
- 10. Update Emergency Eyewash Station Testing records

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Use of Emergency Eyewash Station

Considerations:

- Use the emergency eye wash station immediately if your eyes are exposed to a hazardous chemical.
- Do not hesitate to use the eye wash station, the first few seconds after exposure to a hazardous chemical (e.g. corrosive chemicals) are critical to decrease tissue damage.
- 1. Push the lever to turn on water
- 2. Immediately flush the eyes for 15-20 minutes
- 3. Keep the eyes open and rotate the eyeballs in different directions to remove contamination from around the eyes, seek assistance to hold eye lids open if required
- Call security (Life threatening 334-5333) or Non-Emergency (Non-Life threatening 334-51234), alternatively go directly to the local on-campus health services at Level 1, Gordon Greenwood Building (Bldg #32).
- 5. Ensure the safety Data Sheet for the chemical is taken to the health services
- 6. Report the injury or exposure using the UQ Incident Reporting Database

Leak Testing of Gas Emergency Eyewash Stations

Considerations:

- Gas cylinders need regular checks to ensure integrity, damage causing a leak causes a physical hazard in the workplace
- All equipment in a gas system must be checked for leaks/damage after initial assembly and monthly thereafter to confirm the absence of leaks. This also applied to gas cylinders in storage
- If a leak/damage is detected it should be reported to the manager and supervisor immediately and corrective action taken prior to use
- Appropriate air leak detector solutions will cling to the surface of gas cylinders making it easy identify leaks due to air bubbles from escaping gas
- Leaks may develop in any part of a gas system, particularly joints
- 1. Ensure gas cylinder assembly connections are connected
- 2. Ensure leak detection solution is compatible with material it will come into contact with
- 3. Using appropriate leak test solution spray all areas of the gas cylinder assembly
- 4. Turn on the isolation tap and pressure regulator
- 5. Look for any bubbling or foaming of the solution as this will indicate leakage

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- a. If bubbling: Turn off gas cylinder place a Faulty Equipment sign and report immediately to supervisor or manager
- b. If no bubbling: Leak testing is successful
- 6. Remove any remainder leak testing solution
- 7. Record results on UQBR Gas Cylinder Leak Testing record

IV. CONSIDERATIONS

- Part 6.2 of the standard AS4775-2007 confirms a minimum flow rate of 75.7L/min for a period of 15 minutes is required. Due to sustainability reasons UQBR test for 15 seconds and then extrapolates to 1 minute to confirm the flow rate/minute.
- Park 7.1 of the standard AS4775 confirms a minimum flow rate of 1.5L/min for a period of 15 minutes is required. Due to sustainability reasons UQBR test for 15 seconds and then extrapolate to 1 minute to confirm the flow rate/minute.

V. SAFETY

1. All accidents, injury or near misses are to be reported immediately to the Facility Manager and recorded on a UQ OHS Incident Reporting Database

VI. REFERENCES

- 1. Australian Standard Emergency eyewash and shower equipment: <u>https://www.saiglobal.com/pdftemp/previews/osh/as/as4000/4700/4775-2007.pdf</u>
- 2. OGTR PC2 work requirements and regulations: <u>http://www.ogtr.gov.au</u>
- 3. QLD WH&S Act 2011: <u>https://www.worksafe.qld.gov.au/laws-and-compliance/workplace-health-and-safety-laws/laws-and-legislation/work-health-and-safety-act-2011</u>
- 4. UQ OHS Unit: http://www.uq.edu.au/ohs/
- 5. UQ OHS Incident Report Form: <u>http://www.uq.edu.au/ohs/index.html?page=141331</u>
- 6. UQ PPL 2.70.08 Storage and Handling of Gas Cylinders: https://ppl.app.uq.edu.au/content/2.70.08-storage-and-handling-gas-cylinders
- 7. UQBR SOPs: <u>V:UQBR/SOPs/Common/UQBR SOPs</u> and <u>http://biological-</u> resources.uq.edu.au/secure/uqbr-sops

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