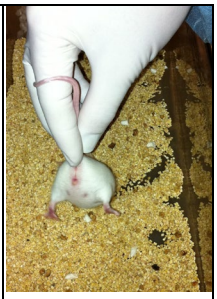
Flinders University

Safe Work Method Statement

Mouse – General Husbandry 18/06/19



College of Medicine and Public Health Animal Facility

SWMS Number	RA Number	RA Score	
SWMS- 1.8	RA1.8	Medium	
Contact Person	**SWMS prepared by**	**AWC Approval Date**	**Review Date**
Roxanne Collingwood	Roxanne Collingwood	18/06/2019	June 2021

Contents

The SWMS **Mouse – General Husbandry** contains the following sections:

- Floors, Walls, and Vents

Legislation

- *Australian Code for the Care and Use of Animals for Scientific Purposes 8th Ed.*
- *Animal Welfare Act 1985*
- *Animal Welfare Regulations 2012*
- *Gene Technology Act 2000* (the Act)
- *Gene Technology Regulations 2001*
- *Work Health and Safety Regulations 2012*

University Policy

- Work Health and Safety Policy 2013
- Responsible Conduct of Research Policy 2016
- NHMRC Guidelines

Local Policy

Use of the College of Medicine and Public Health Animal Facilities by all staff and researchers of the College of Medicine and Public Health, Flinders University, is subject to awareness of, and adherence to the following:

Research Involving Animals:

- The University holds a licence for the use of animals for teaching and research purposes. To satisfy the requirements of the licence, anyone wishing to undertake teaching and research using animals must submit a proposal to the Animal Welfare Committee (via the Animal Ethics Review Sub- Committee. No work with animals may commence until written approval has been received from the Animal Welfare Committee. Standardised application forms for Research and Teaching can be found on the Flinders University website listed below. It is your responsibility to regularly check this site for updates to guidelines, forms etc
  http://www.flinders.edu.au/research/researcher-support/ebi/animal-ethics/animal-ethics_home.cfm

- **All staff and students involved in animal research must complete Animal Ethics Online Training (AEOT) and must also regularly attend Animal Researcher Information Sessions (ARIS).**

- **All personnel working with Genetically Modified Animals (GMO) or working with in a PC1 or PC2 facility must attended a Biosafety Training Day every 3 years**

Safe Work Method Statement

Refer to Risk assessments, Safe Work Method Statements for chemicals, processes and plant equipment where appropriate. All projects must have an accompanying Risk Assessment signed by the Animal Facility Manager

SWMS 1.0 Mouse- Sexing, Handling, Restraint and Ear Notching
RA 1.0 Mouse- Sexing, Handling, Restraint and Ear Notching
SWMS 1.7 Mouse -Transportation
RA 1.7 Mouse -Transportation
SWMS 10.2 - Emergency Contingency
RA 10.2 - Emergency Contingency

Personal Protective Equipment Required

- **Gloves**
- **Gown**
- **Mask**
- **Hair Net**
- **Shoe Covers**

Hazards and Controls

- **Animal bites- training, demonstrate competency, adhere to SWMS.**
- **Animal Scratches- training, demonstrate competency, adhere to SWMS.**
- **Unintentional release of GMO- number of animals checked and recorded on "Researcher Movement Sheet". Cage/ shipper secured with in the Animal room or PC facility to prevent accidental release. Attend Biosafety training every 3 years.**

Before Work Commences

Ensure that you are aware of the locations of the following:

- **Spill Kit**
- **Fire Extinguisher**
- **Eye Wash**
- **Exits**

Risk Assessment and SDS (Safety Data Sheet) - Ensure that you have read and understood for all the substances being used.

Equipment

- **Check for safety and electrical compliance**
- **Ensure that you have read and understood the Risk Assessment and Safe Work Method Statement**
- **Obtain training and demonstrate competency before using any equipment**

General Information

- **All procedures are to be performed by trained competent staff.**
- **Training is available from senior animal house staff or Animal Welfare Officer.**
- **Evidence of training must be made available on request**

Environmental Parameters

- Light cycle: 12 hours light/12 hours dark (exceptions are noted on the room sign)
- Humidity: 30%-70%
- Temperature: 22ºC +/- 2°
- Air flow: 10-20 Air Changes per Hour
- Report environmental problems in the room (i.e. room temperature variations >+/- 2°F from 22°C, obvious ventilation changes) to the Manager or Senior Animal Care Officer and/or FMC Control Centre ext. 64582.

Room Entry and Exit

1. Mop the square in the room entrance with F10sc.
2. Step into the square and put on mask, hair net, and gown.
3. Put one shoe cover on, step over the square, then put on the other shoe cover.
4. Put on gloves. If they develop a hole at any time whilst in the room, replace the glove.
5. To Exit the room, mop the square with F10sc, remove one shoe cover, then step into the square and remove the other shoe cover. NOTE: Shoe covers can be reused if re-entering the room.
6. Remove and label gown if required to re-enter the room. Discard cap, mask, and gloves.

Daily Room Checks

- All cages are to be checked daily for food and water, and topped up if necessary. Cages must be changed if the water bottle has leaked.
- Rooms are stocked with supplies.
- Health problems are reported to Senior Animal Technician, Animal Welfare Officer, and the Principal Investigator (PI) or designated lab contact person.
- Floors must be swept to remove any debris.
- Room Check List and Clinical Record Sheets (if applicable) must be filled in on completion of the room check.
- If Animals are entering or exiting the room, they must be recorded on the “Researcher Animal Movement Sheet”.

Water

- Water is provided ad lib via bottle. Technicians must check the sipper tube if the water level has not changed for blockage or air pockets.
- Water bottles are emptied, scrubbed, and refilled weekly.
- When returning water bottles to the cage, invert the bottle several times to ensure there isn’t an air lock present or a blocked sipper tube.

Food

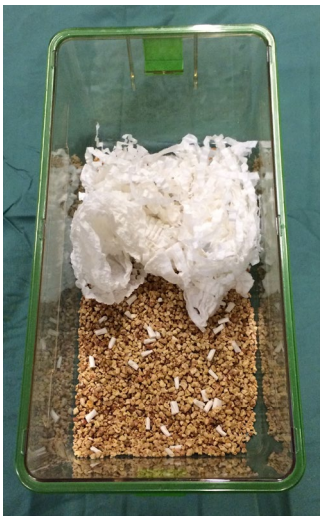
- Food is to be provided ad lib, unless otherwise indicated by special instruction by the researcher.
- Food is to be topped up at cage change time, or as required.
- A handful of food should also be scattered on the bottom of the cage at cleaning to allow for foraging behaviour.

- Bags of food are emptied directly into the feed bin, with the cover in place at all times when mice are not being fed.
- Discard expired feed.

Stocking Density

Static Micro-isolator
18cm(w) x 29cm(l)
Total floor area 522cm^2

IVC – Individually Ventilated Cage
Allen Town
18cm(w) x 38cm(l)
Total floor area 684cm^2



IVC – Individually Ventilated Cage
Tecniplast
20cm (w) x 31cm (l)
Total floor area 620cm^2

Minimum Housing Standards for Laboratory Mice*

Cage Type	Area cm^2	Maximum No. Mice (<30g)	Minimum Gel Packs
IVC- Allentown	684	5	N/A
IVC- Tecniplast	620	5	N/A
Micro-isolator	522	5	N/A

**Dept. Primary Industries "Code of Practice for the Housing and Care of laboratory Mice, Rats, Guinea Pigs and Rabbits" 2004*

Cage Preparation

- Cages are made up and stored in the clean cage room.
- Corn Cob bedding is to be used in IVC cages at a depth of approx. 1cm plus a small handful of shredded paper towel.
- Fibre Cycle bedding is to be used in static micro-isolators and open top cages at a depth of approx. 1cm plus a small handful of shredded paper towel.

Cage Cleaning

NOTE: IVCs are be cleaned fortnightly unless they are wet due to a leaking water bottle or particularly dirty which may be strain specific. Micro-isolators and open top cages are to be cleaned weekly.

Cages should be opened in the cage change station or laminar flow cabinet where possible.

Gloves must be changed between Research groups to prevent cross contamination, and spray laminar flow or Cage Change Station with F10sc solution.

All cages must have a cage card with the researchers name, ethics number, strain, sex, date of birth or received, source, number of animals, and any procedures.

1. Turn on the laminar flow cabinet or cage change station for a couple of minutes to allow air flow to equilibrate (the vents must not covered at any time). Spray with work surface F10sc solution.
2. Remove the first dirty cage from the rack for cleaning, and place it and a clean cage into the cabinet or change station.
3. Remove the dirty water bottle.
4. Open the cage and make sure that the number of mice in the cage matches the number on the cage card. If not, contact the Researcher to see whether they have removed an animal and forgotten to change the cage card, and contact the Senior Animal Technician.
5. Put a handful of food into the bottom of the clean cage.
6. Transfer each mouse by gently picking them up by the base of the tail, and checking the sex and general health of each animal. There must not be more than 5 mice per cage.
7. Top up the food hopper and using a damp cloth wipe over the grid to remove any dust.
8. Replace the lid and clean water bottle. Return the cage to the rack.
9. Complete this process until all of the cages have been cleaned.

10. Animals leaving or entering the room must be recorded on the "Animal Movement Check List" located in each animal room. (*See SWMS 1.7 Mouse transportation*).

11. Remove dirty cages from the animal room, sweep and mop floors. Organic waste from non- containment rooms can be put into the organic waste bins for disposal. Non organic waste must be put into the general waste bin for disposal.

Animal Health and Monitoring

- During cleaning, check all animals for any abnormalities, record all abnormalities on the "Animal Health Care Form", and inform the Researcher and the AWO.
- Animals that required ongoing monitoring or treatment must be recorded on a Clinical Record Sheet (CRS), and an orange spot placed on the cage card.
- Animals with a 'Pregnant' or 'Newly Weaned' card must be closely observed/ checked, and advice sought where necessary.
- If an animal needs medical attention, contact the Animal Welfare Officer and researcher or their nominated laboratory contact.
- Abnormal animal deaths must be reported immediately to the Animal Facility Manager and Animal Welfare Officer, and an Animal Welfare Incident form completed and (where necessary) a necropsy performed.

Floors, Walls, and Vents

- Floors must be swept daily to remove any debris.
- Floors must be swept and mopped with F10sc (1ml F10sc: 125 ml water) on the day of cleaning and recorded on the Room Check List.
- Walls and vents are to be dusted at this time.

SWMS Review

This SWMS currently applies to the animals housed in the College of Medicine and Public Health Animal Facility. This SWMS will be reviewed 3 yearly, but also updated more frequently as policies, techniques and animal care requirements change.

Position	Name	Contact Details
Manager Animal Facility	Roxanne Collingwood	8204 4380 roxanne.collingwood@flinders.edu.au
Animal Welfare Officer	Dr Lewis Vaughan	0450 424 143 awo@flinders.edu.au

Useful References

http://www.nhmrc.gov.au

http://www.ogtr.gov.au/internet/ogtr/publishing.nsf/Content/home-1

http://www.adelaide.edu.au/ANZCCART/

http://www.flinders.edu.au/research/researcher-support/ebi/animal-ethics/animal-ethics_home.cfm

http://www.depi.vic.gov.au/agriculture-and-food/animal-health-and-welfare/animal-welfare/animal-welfare-legislation/victorian-codes-of-practice-for-animal-welfare/code-of-practice-for-the-housing-and-care-of-laboratory-mice,-rats,-guinea-pigs-and-rabbits

Any questions regarding the above guidelines and any technical advice/ assistance required can be directed to Animal Facility Manager.