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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).

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

RA 4.0 Rabbit- Sexing, Handling and Restraint

SWMS 4.0 Rabbit- Sexing, Handling and Restraint

SWMS 4.1 Rabbit injection techniques

RA 4.1 Rabbit injection techniques

SWMS 4.4 Rabbit Anaesthesia and Analgesia

RA 4.4 Rabbit Anaesthesia and Analgesia

Personal Protective Equipment Required

- Gown/ coat
- Mask
- Hair Net
- Shoe Covers

Hazards and Controls

- > Animal bites- training, demonstrate competency, adhere to SWMS
- > Animal Scratches- training, demonstrate competency, adhere to SWMS
- > Animal Allergies- wear PPE when handling animals or cleaning pens

Before Work Commences

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

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

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

Equipment

- Ensure that you have read and understood the Risk Assessment and Safe Work Method Statement
- Obtain training 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 is available in the "Training Needs Analysis".

Environmental Conditions
15 – 24°C
40-70%
12hr light: 12hr dark
350 lux (max)
10-20 air changes/ hr

	Normal Physiological Parameters
Life Span	5-8yrs
Sexual maturity	4 – 6 months
Productive life Span	2-3 yrs or 10 litters
Gestation period	29 – 35days
Average litter size	4-10
Neonate weight	30 – 80g
Adult weight range	2-6kg
Body temperature	38 – 40°C
Heart Rate (beats per minu	ite) 130- 300
Respiration Rate (per minu	ite) 30 – 60
Tidal Volume	20ml (4-6ml/kg)

Tidal Volume 20ml (4-6ml/kg)
Food Consumption 5% body weight / day
Water Consumption 8 – 10 % body weight / day

Minimum Housing Requirements				
	Weight (kg)		Min floor area cm²	
	single group	<2	2000	
		2 to 4	4000	
		<2	1300	
Rabbits		2 to 4	2600	
Rubbito		4 to 6	3300	
	Breeding	Female plus litter	9300	

Daily Monitoring and Husbandry

- 1. On entry to the rabbit room, put on gown, hair net, mask, and shoe covers.
- 2. Check all animals for any anomalies. If anomalies are observed, scan microchip and complete Clinical Record Sheet (CRS). Contact Animal Welfare Officer (AWO), Senior Animal Technician, Animal Facility Manager, and researcher, if applicable. Complete "SOMAF Animal Health Care Form". (NOTE: lacerations can occur from kicks from litter mates in the pen).
- 3. Check food hoppers, and top up with pellets if required. Powder may need to be removed from the bottom of the food hopper.
- 4. Remove and clean the water bowls or bottles, and refill with fresh water.
- 5. Give rabbit's fresh meadow and/or Lucerne hay while rabbits are growing every second day or daily to pens with 6 or more rabbits. The amount of hay given will depend on the number of rabbits per pen.
- 6. Sweep the floor.
- 7. Mop the square with Virkon when exiting the room.
- 8. Remove PPE and leave inside the rabbit room.
- 9. Complete the door check list and initial.

Cleaning Rabbit Pens

NOTE: Before cleaning any cages or pens, check the number of animals against the cage card. Notify the Senior Animal Technician immediately if there are any discrepancies.

Rabbits are territorial and develop a social hierarchy- do not mix groups of rabbits post weaning.

- 1. Rabbit pens are cleaned once a week or as required. Pens with single rabbits may be cleaned fortnightly, and spot cleaned every other week.
- 2. Scan each rabbit's microchip and record body weight on the appropriate Stock or Breeder "Weight Record", and put them into holding cages. Clean one pen at a time to make sure that Rabbits are not accidently mixed.
- 3. If any rabbit is found to lose weight (excluding weight loss due to Kindling), contact the AWO, Senior Animal Technician, Animal Facility Manager, and researcher, if applicable.
- 4. Remove water bowl and pellet hopper.

- 5. Using an appropriate size shovel, remove all of the soiled bedding and place it into the organic bin.
- 6. Use an appropriate size broom to sweep up any remaining bedding, and remove the remains with the dustpan and broom.
- Using a mop and a bucket of hot water, mop the floor of the pens and wipe over the walls (Note: the bucket may need to be changed several times depending on how soiled the water becomes).
- 8. With a mop bucket containing Virkon solution and a clean mop, mop the floor of the pen.
- 9. Line the floor of the pen with cardboard to assist absorbency, and pour sufficient wood shavings to cover approximately 2/3 of the floor pen leaving the front clear.
- 10. Clean the hides with a wet cloth and return it to the floor pen.
- 11. Provide each pen with approx. 2 biscuits of straw and 1/2-1 biscuit meadow hay, depending on the number of rabbits housed in the pen. Add 1/2-1 biscuit of Lucerne hay to pens with growing rabbits.
- 12. Refill food hopper and remove excess powdered food. Scrub water bowls or bottles, and refill with clean water.
- 13. Sweep and mop room with a Virkon solution.

Cleaning Rabbit Battery Cages

NOTE: Rabbits housed in battery cages can become distressed when you try to catch them and may scratch. Wear long sleeve lab coat and leather, or nitrile safety gloves.

- 1. Rabbits housed in battery cages are cleaned once a week, and provided with a minimum of 30 mins exercise per week.
- 2. Scan each rabbit's microchip and record body weight on the appropriate Stock or Breeder "Weight Record".
- 3. Using an appropriate size shovel, remove all of the soiled bedding and place it into the organic bin.
- 4. Use an appropriate size broom to sweep up any remaining bedding, and remove the remains with the dustpan and broom.
- 5. Using a bucket of hot water, wipe over the walls and base. (Note: the bucket may need to be changed depending on how soiled the water becomes).
- 6. Line the floor of the cage with cardboard to assist absorbency, and pour sufficient wood shavings to cover the base.
- 7. Provide each cage with approximately 1/2 biscuits of meadow hay. Ensure that the hides are in place.
- 8. Refill food hopper and remove excess powdered food. Scrub water bottles, and refill with clean water.

Monitoring Weights

- 1. All Rabbits are to be weighed at least weekly, and recorded on "Stock" or "Breeder" "Weight Record".
- 2. Kits are weighed daily from 7 days of age, and recorded on the weight record. Any kits that fail to gain weight are bottle fed with "Wombaroo Rabbit Milk Replacer" until the kit is either

- weaned or able to feed naturally and gain weight. (See SWMS 4.6 Rabbit Breeding Colony Maintenance).
- 3. Rabbits from weaning to 2 weeks post weaning are weighed 2 times per week, and weights recorded.
- 4. If any rabbit is found to lose weight (excluding weight loss due to Kindling), contact the AWO, Senior Animal Technician, Animal Facility Manager, and researcher, if applicable.

Clipping and Grooming

- 1. Check the rabbits toe nails in the first week of each month, and trim nails when cleaning as required.
- 2. Record on the health care form.

Treatment, Euthanasia, or Deceased Animals

- 1. Rabbits can suffer from a range of illnesses. If a rabbit is found to be sick or injured, call the AWO immediately.
- 2. Scan the microchip, weigh the animal, and record all information on the animal care form and the CRSs located in the room.
- 3. Provide treatment as recommended by the AWO.
- 4. If the severity of the illness requires euthanasia, contact the Animal Welfare Officer and refer to SWMS 4.7 Rabbit Euthanasia.
- 5. Place the body in a yellow bag, label the bag, and leave it in the cool room. DO NOT freeze for either the AWO or a competent Animal Technician to perform a necropsy. Complete a necropsy request form with all of the appropriate information.
- 6. On finding a deceased animal, place the body in a yellow bag, label the bag, and leave it in the cool room for either the AWO or a competent Animal technician to perform a necropsy. Complete a necropsy request form with all of the appropriate information.
- 7. If an Animal technician has performed the necropsy, photos of each stage must be taken as per SMW- Necropsy of Rodents. Report finding to the AWO to determine whether it is an Unexpected Adverse Event (UAE), and if so, complete a UAE form and submit to the AWC within 72 hours.

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 or 0415703 401 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.criver.com/files/pdfs/rms/nzw/rm rm d nzw rabbit.aspx

http://agriculture.vic.gov.au/agriculture/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.