1. **PURPOSE**

This Standard Operating Procedure (SOP) describes the basic procedures for routine care and husbandry of rabbits.

2. **RESPONSIBILITY**

Animal care staff, facility supervisors, Facilities Manager.

3. **MATERIALS**

   3.1. Darwin cage cards
   3.2. Rabbit diet (within 6 months of the milling date)
   3.3. Clean water bottles
   3.4. Clean rabbit cages
   3.5. Paper pan liners
   3.6. Bedding
   3.7. Clean litter boxes
   3.8. Clean environmental enrichment devices
   3.9. Disinfectant solution

4. **PROCEDURES**

4.1. Observation of animals:
   4.1.1. Observe all rabbits daily for illness, injury and general condition, and to ensure they have sufficient food and water, including weekends and holidays.

4.2. Emergency and holiday care:
   4.2.1. Provide routine care and husbandry for all rabbits on weekends and holidays.
   4.2.2. Make provisions for emergency care by providing both work and after hours contact information for Principal Investigators (PI’s) and their staff. Provide special requests or instructions if needed.

4.3. Animal identification methods:
   4.3.1. Identify all pens or cages with a cage card.
   4.3.2. Include, at a minimum, the following information:
      4.3.2.1. Investigator
      4.3.2.2. Protocol number
      4.3.2.3. Species
      4.3.2.4. Strain
      4.3.2.5. Sex
      4.3.2.6. Number of animals in the pen
   4.3.3. Identify individual animals as needed in accordance with SOP. Examples of individual identification methods include: micro-chips, tattoos or ear tags.

4.4. Food and water:
   4.4.1. Feed animals to meet current National Research Council (USA) recommendations for rabbit nutrition.
   4.4.2. Food storage:
4.4.2.1. Store feed on plastic pallets off the floor and 4-6 inches away from walls, in a vermin-proof storeroom.

4.4.2.2. Store open feed bags in leak-proof containers with tightly fitting lids.

4.4.2.3. Maintain temperature and humidity controls in the storeroom. Avoid temperatures above 21°C and extremes in humidity. Use feed within 6 months of milling date.

4.4.2.4. Stack feed in a manner that allows easy reading of the milling date.

4.4.3. Check automatic watering devices daily, and flush system weekly, for proper operation and cleanliness.

4.4.4. Change the automatic water system’s Pressure Reducing Station filter once per month.

4.4.5. Empty water bottles, rinse and fill with fresh water daily.

4.4.6. Monitor water quality routinely to ensure that it is free of contaminants that could potentially expose animals to chemical or infectious agents. Refer to SOP for water quality monitoring requirements.

4.5. Social and environmental enrichment:

4.5.1. Group-house rabbits whenever possible.

4.5.2. Provide environmental enrichment devices for all rabbits.

4.5.3. Single-housed animals will benefit from time in exercise pens.

4.5.4. Examples of enrichment include, but are not limited to, the following: shelters, nesting boxes, plastic balls and dumbbells. Please refer to Environmental Enrichment Program for Rabbits SOP.

4.6. Euthanasia and disposal of dead animals:

4.6.1. Euthanize rabbits by overdose of anesthetics. Refer to SOP.

4.6.2. Ensure that euthanasia is conducted by trained and experienced staff.

4.6.3. Dispose of dead animals by incineration.

4.7. Vermin control:

4.7.1. Refer to SOP for a description of the vermin control program.

4.8. Environment and environmental control:

4.8.1. Maintain room temperatures between 16 and 21°C.

4.8.2. Maintain relative humidity between 40% and 70%.

4.8.3. Maintain a daily log of room temperature and humidity.

4.9. Bedding:

4.9.1. Use pine shavings as bedding material for pen-housed rabbits.

4.9.2. Use enough bedding to keep the rabbits clean and dry until the next scheduled change.

4.9.3. Store the bedding off the floor on pallets and in such a manner to prevent contamination.

4.10. Lighting:

4.10.1. Provide a regular diurnal lighting cycle.

Note: Lights are controlled by timers set at a photoperiod of 12 to 14 hours of light. Check the timer performance routinely.

4.11. Space requirements:

4.11.1. Provide pens or cages that are appropriate in size for the number and size of the rabbits housed in them. Refer to CCAC recommendations.

4.12. Cleaning of cages or cage banks:

4.12.1. Change the pan liners three times per week, at a minimum.

4.12.2. Change the cage banks every two weeks, at a minimum. Only transfer one animal at a time.

4.12.3. Change water bottles weekly.

4.12.4. Environmental enrichment devices are cleaned and replaced at the time the cages are changed.
4.13. Cleaning of pens:
   4.13.1. Three times a week, remove wet bedding and empty litter pans. Replenish with fresh bedding.
   4.13.2. Remove bedding and disinfect pens, surrounding walls, food hoppers/bowls and litter pans once every two weeks.
   4.13.3. Environmental enrichment devices are cleaned and replaced at the time the pens are cleaned.

4.14. Cleaning and sanitation of housing room and equipment:
   4.14.1. Weekly:
   4.14.2. Monthly:
       4.14.2.1. Wipe down all surfaces such as sinks, doors, door jams and doorknobs, windows, cart tops, shelves, etc. with the disinfectant solution.
       4.14.2.2. Clean room exhaust grills.
   4.14.3. Bi-annually:
       4.14.3.1. Wash all walls with disinfectant solution.

4.15. Transportation:
   4.15.1. Transport rabbits as per SOP.

4.16. Preparation disinfecting solution:
   4.16.1. Wear personal protective equipment when preparing and using disinfectant solution.
   4.16.2. Dilute according to manufacturer’s recommendation.
   4.16.3. Clean surfaces prior to disinfection to remove any organic material.
   4.16.4. Apply disinfectant and allow for adequate contact time.

4.17. Waste Management:
   4.17.1. Deposit non-regulated or non-infectious Medical Waste and soiled materials in dumpsters.
   4.17.2. Regulated or infectious Medical Waste is processed by McGill University’s Waste Management program.

5. SAFETY

5.1. Working with rabbits can trigger related allergies. Check with the facility supervisor regarding requirements for personal protective equipment and refer to SOP.

5.2. Observe SOP for animal related injury.