

Standard Operating Procedure

SOP Number: **02-18-4403**

Service: **Research**

Operating Section: **Husbandry**

Unit: **CMF**

Title: **General Husbandry for Mice in Metabolic Cages**

Purpose:

To describe the minimum acceptable husbandry standards for mice (*mus musculus*) housed in metabolic cages.

Procedure:

- 1) Enclosures
 - a) cage type: polymer caging
 - b) cage size: 19" x 9" x 8"
 - c) cage occupancy: 1 mouse per cage for metabolic purposes
 - d) special caging: metabolic
 - e) special equipment: microisolator tops

- 2) Environment
 - a) Lighting is provided by overhead fluorescent fixtures on a 12/12 hr cycle.
 - b) Temperature will be maintained between 68-79°F (20-26°C). Relative humidity will be maintained between 30-70%. System alarm parameters are set to notify the Operations Manager, CMF of environmental extremes. Either through system alarms, or manual calls, the staff will notify the Operations Manager, CMF when the temperature is within 2 degrees of low or high parameters, or if humidity is out of range.
 - c) Supplied air will be 100% fresh exchanged at a rate of 10-15 air changes per hour and exhausted to the exterior of the building.

- 3) Husbandry Services
 - a) feeding: Measured amount per protocol
 - b) watering: Water bottles are changed weekly or more often as needed.
 - c) cage changes: Boxes are sanitized weekly or more often as needed.
 - i) Cages, tops, water bottles and feed tubes are emptied and the waste properly disposed of.
 - ii) Cage components that have direct contact with animals are soaked in Labsan 256 (Quaternary Ammonia) allowing a minimum of 3 minute contact time followed by thoroughly rinsing in warm water. This includes cage bottoms, lids, sipper tubes, feeders and activity wheels.
 - iii) Cages are dried with paper towels and/or allowed to air dry.
 - iv) ATP swabs are taken post cleaning procedures by CMF staff and recorded on a log sheet. Repeat cleaning is required until a "pass" result is achieved. All caging must pass ATP testing prior to use.
 - v) Coordinate with the Lead Laboratory Animal Care Technician/CMF or the Veterinary Diagnostic Coordinator/CMF when cages are ready for testing prior to use of animals in the metabolic cages.
 - d) rack changes: Metabolic rack is sanitized monthly.

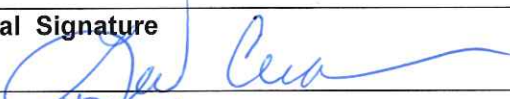

- 4) Cleaning Patterns
 - a) Floors of rooms and adjacent corridors will be swept daily.
 - b) Floors of rooms and adjacent corridors will be sanitized with an appropriate disinfectant (see SOP "Preparation and Use of Disinfectants") at least twice weekly.
 - c) Sinks are sanitized with an appropriate agent at least twice weekly.
 - d) Doors, door frames, and all other surfaces are sanitized weekly.
 - e) Rooms, including walls and ceilings, are sanitized monthly, as emptied of occupants, or more often as needed, using appropriate disinfectants (see SOP "Animal Room Sanitization").
 - f) Accidental spills and soiled wall surfaces will be cleaned as discovered or reported.
 - g) Unauthorized equipment left in animal or procedure rooms will be removed daily unless otherwise approved by the Operations Manager, CMF.
 - h) Brooms, dustpans, and garbage cans are sanitized weekly.

- 5) Maintenance/Repair
 - a) All towel dispensers will be checked daily and replenished as necessary.
 - b) Trash containers will be checked daily and emptied as needed.
 - c) Room exhaust air filters are changed or cleaned monthly or more frequently if needed.
 - d) Light fixtures and tubes are checked daily. Any failures will be reported to the Operations Manager, CMF or designee who will then generate work orders for repair by Facilities personnel.

- 6) All animals are checked daily by the CMF staff. Any abnormalities are to be reported immediately to the veterinary staff via an animal observation form.

- 7) All husbandry practices will be documented on husbandry logs. This log will be maintained by the CMF staff responsible for the specified room. The log will be kept in/or adjacent to the room and submitted to the Operations Manager, CMF, upon completion of each month.

APPROVALS

Responsible Official Signature		Date	07/23/19
QA Signature		Date	07/23/2019
Version #4	Effective Date	Supersedes #3	Original Date 08/04/10