

# CMR STANDARD OPERATING PROCEDURE

**TITLE: Validation of Wrapped SPP Cages** 

SOP Category: Gnotobiotic CMR SOP #: 4.08 Page: 1 of 3

Effective Date: 10/1/24 Approval: LaTisha V. Moody, DVM, DACLAM

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#### SCOPE:

This document describes the procedures to be followed when validating enrichment and bedding for germ free and gnotobiotic mice. This SOP applies to all Animal Care Staff (ACS), ACS Supervisors (ACSS), Veterinary Staff (VS), and Research Staff members (RS) at the Rutgers University facilities.

#### **OBJECTIVE**:

The objective is to validate cage contents of Allentown Individually Sealed Positive Pressure (SPP) before the introduction to germ-free or gnotobiotic mice. Validation will be frequently performed anytime there is a change in sterilization process, configuration of cages or increase of items being sterilized to ensure proper sterilization.

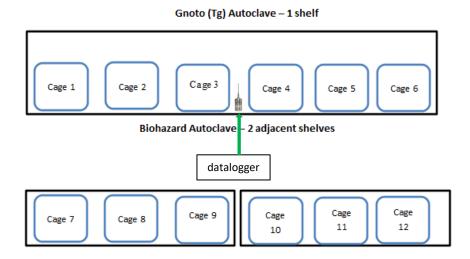
#### PROCEDURES:

## Validation of SPP cages in the Gnotobiotic & backup Biohazard autoclave

- 1. Prepare SPP cages according to SOP # 4.14 Prepping & sterilizing wrapped SPP cages.
- 2. Prepare 12 cages for the Gnotobiotic autoclave in MSB 685B. Prepare 12 cages for the Biohazard autoclave in the MSB main vivarium. For validation purposes, the Omega high temperature (datalogger) probe must be placed inside of the load. For secondary backup validation purposes, a biological indicator (BI) may be placed inside the cage to ensure all contents will be sterilized in the form of liquid suspensions (Prospore ampules) or spore strips (Crosstex).
- 3. Assemble the cages for autoclaving. Double wrap cages with autoclavable drape and place autoclavable tape onto the side. Arrange the cages inside the autoclave according to the image below.

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- 4. Select seal door
- 5. For the Gnotobiotic autoclave select dry cycle "1" for cages (40-minute sterilization time). For the biohazard autoclave select dry cycle "1" for cages (30-minute sterilization time).
- 6. Press "start cycle"
- 7. Record information and date load was autoclaved on the Autoclave Run Log.
  - a. If using BI's as a backup: after autoclaving process has been completed, carefully remove the Prospore ampule and incubate on the Mesa benchtop incubator. Check the Prospore in 48 hours after incubation and record results. If there is a color change in the tube (yellow), then that indicates growth, and the validation has failed and the whole set-up must be re-validated.

### Validation of SPP cages in the MSB Bulk walk-in Autoclave

- 1. The MSB bulk walk-in autoclave is located in the clean side cage wash.
- 2. Prepare 36 cages according to SOP # 4.14 Prepping & sterilizing wrapped SPP cages.
- 3. Load them onto the autoclavable metal shelf rack and place 6 wrapped cages onto each shelf. Line each cage up next to each other.
- 4. Place the Omega datalogger between the middle most cage in the load on the middle shelf.
- 5. Open the autoclave door. Roll the autoclavable metal shelf rack into the autoclave.
- 6. Seal the autoclave door.
- 7. Using green arrows, choose "Cycle 07 GB-cages" and click "Select cycle. "Select "Next" and select "Start cycle."
- 8. The prompt will read "Cycle may be started." Click the green start button to run the load.

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9. Once the load has been completed, record information and date load was autoclaved on the Autoclave Run Log. Upload the information from the datalogger according to SOP # 4.32 How to Use the Datalogger.