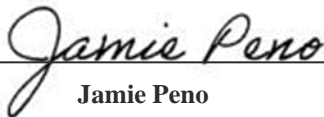
 <div style="display: inline-block; vertical-align: middle;"> <b>DIVISION OF RESEARCH &amp; INNOVATION</b>        Research Integrity &amp; Compliance     </div>		<b>UNT Lab Animal Facility</b> <b>Standard Operating Procedures</b>	
<b>Title:</b> Animal Cagewasher Use and Maintenance			
<b>Effective Date:</b>	August 15, 2021	<b>Document Number:</b>	LAF-SOP-05-12.00
<b>Approval/Date:</b>  <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">         _____  <b>Jamie Peno</b>        Assistant Vice President, Research Integrity and Compliance     </div> <div style="text-align: center;">       8/15/2021        _____  <b>Date</b> </div> </div>			
<b>REVISION HISTORY</b>			
<b>Date</b>	<b>Section</b>	<b>Author</b>	

## PURPOSE

This Procedure is to describe the general use and maintenance procedures used with the Lynx Cage and Rack Washer, Model 495LX (Serial No. 2018-2673) housed in the UNT Animal Vivarium.

## SCOPE

It is the responsibility of animal care staff and management to review and adhere to the procedures described below when using the Lynx Cage and Rack Washer in the UNT Animal Vivarium. All users should be trained appropriately before using this equipment. For product specifications or diagrams, refer to Lynx Cage and Rack Washer User Manual.

## DEFINITIONS AND ABBREVIATIONS

UNT- University of North Texas, Denton

SOP/SOP's- Standard Operating Procedure(s)

LAF- Laboratory Animal Facility

AV- Attending Veterinarian

## PROCEDURES

- I. General Operation of Cagewasher
  - A. To start machine operation, operator must turn the panel disconnect switch to the ON position.
  - B. Next the operator should switch the control power switch to the ON position. This activates the unit for all operations.
  - C. The screen will display the Lynx logo.

- D.** The operator must touch the logo to advance to the main menu screen.
- E.** The operator should place the load to be cleaned, appropriately loaded on the transfer cart, completely into the chamber.
- F.** Close the chamber door and ensure it easily latches and seals
- G.** Select the desired cycle: The unit has multiple cycle options for different types of caging material, sanitation purposes, and test runs. Special cycles may be programmed by management staff as approved.
  - 1. Rodent cycle- is used for regular rodent caging with full acid and detergent at 180°F.
  - 2. UNT Supercage cycle- is used for special rodent caging with only detergent at 100°F.
  - 3. Racks, carts and cans cycle- uses only detergent at 120°F.
  - 4. Descaling cycle- is used for descaling the washing chamber from hard water scale build up. The cycle uses only acid for 600 seconds at 130° F.
  - 5. Test cycle- is used for maintenance checks to ensure the cagewasher unit is reaching appropriate temperatures. No chemical agent is used and temperatures must successfully reach 180°F.

## **II. Cagewasher Maintenance**

### **A. Weekly Maintenance :**

- 1. An automatic self-cleaning is performed to clean debris, such as fur and bedding, from filter screens.
- 2. Incoming utility gauges should be inspected for proper functionality.
- 3. Cabinet maintenance is performed to prevent wear and rusting by wiping down the exterior cabinet with a soft cloth and non-abrasive stainless-steel cleaner to maintain surface luster and repel water.
- 4. Emergency cables should be inspected to be in good condition.

### **B. Monthly Maintenance :**

- 1. Oscilating spray jet system should be inspected by checking for and removing any debris in the jet nozzles.
- 2. A Descaling cycle should be performed to prevent hard water scale and build up in unit.
- 3. The header drive system (external cylinder only) should be greased to maintain functionality and increase longevity of use.
- 4. Inspection and cleaning of debris from sump level probe should be performed.
- 5. Inspection and cleaning of the tank level probe should be performed.
- 6. Inspection and cleaning of sump temperature probe should be performed.
- 7. Inspection and cleaning of side tank temperature probe should be performed.
- 8. Lubrication of spring loaded door latches should be performed to prevent rusting and ensure proper functionality.
- 9. A quality check should be performed by running a routine cycle at the highest temperature. Attach a strip of Steam Temperature Indication Tape to the rack inside the chamber prior to starting the cycle. Remove the strip after the cycle is complete and observe for the appropriate color change (Black) to ensure the strip was exposed to maximum temperatures during the cycle. Attach the strip of tape to the monthly temperature check form. Should the strip not complete a full color change, attach to the monthly check form and notify LAF Manager before continuing use.

### **C. Bi-Annual (every 6 months) Maintenance :**

1. Lubrication treatment for pump motor bearings should be performed.

**D. As- Needed Maintenance :**

1. Washing chamber should be inspected and cleaned to ensure descaling cycles have thoroughly removed any hard water scale or build-up.
2. Chamber lighting bulb replacement.

**III. Troubleshooting and Repair**

- A.** Should the unit require any troubleshooting or maintenance, the LAF manager should be notified immediately and the unit should be clearly labeled “Out of Use” to ensure safety of users.
- B.** For in-house troubleshooting, refer to the Lynx Cage Washer Manual.
- C.** Repairs should only be completed by an authorized and trained individual.

**IV. Safety**

- A.** This unit should always be maintained to manufacturer standards and should have appropriate useage training and signage to ensure safety of users.
- B.** This unit reaches high temperatures and safety mechanisms and procedures are in place to ensure individuals are not harmed during use. All users should follow recommended procedures for use and maintenance.

**REFERENCES**

1. Lynx Cage Washer Manual

**APPENDECES**

- Chamber Temperature Check Log Form