

SOP #: 802.02Title: **SOP -** Operation of the Cage Washer Machine

Approvals:

Attending Veterinarian

Date: 06/27/20191. Purpose

1.1 The intent of this standard operating procedure (SOP) is to describe how to properly operate the cage washer machine located in the Animal Care Facility.

2. Responsibility

2.1 ACF Personnel

3. Definitions

3.1 ACF - Animal Care Facility

3.2 Tri-Temp Tape – A tape that contains three indicator strips that provides verification that the temperature attained the cage washer reached between 160 – 180 °F through color change indicators

4. Guidelines

4.1 Cage Washer Operation

4.1.1 Turn on the machine and wait until the different cycles appears in the electronic display.

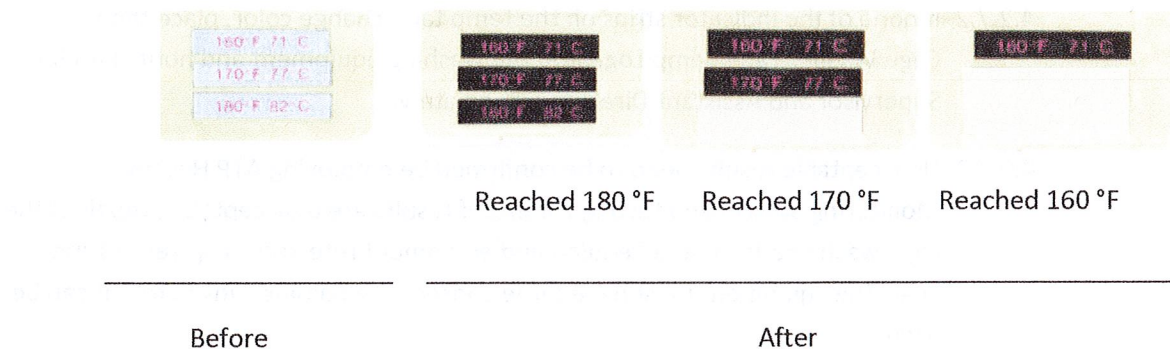
4.1.2 Check that “cages and bottles” cycle is the default selected.

4.1.3 Place the temperature tape indicator in an item to be sanitized in the first load of the day.

- 4.1.4 Load the machine according to the load configuration established by the facility manager. Make sure that all items will receive a direct flow of hot water from the sprays.
- 4.1.5 Close the door and begin cycle by pushing twice the cycle button located at the upper right-hand side of the machine.
- 4.1.6 The machine will then go through the manufacturer programmed set of cycles of wash and rinse before it has reached the completion of the wash cycle.
- 4.1.7 When cycle is completed unload cages from the clean side of the machine.

4.2 Temp Tape Procedure

- 4.2.1 Temp Tape are used for the monitoring of temperature of the water for proper sanitation in the cage wash systems
- 4.2.2 Tri-Temp Tapes (160 °F, 170 °F, 180 °F)
- 4.2.3 Daily testing – Place one Tri-Temp Tapes strips on a random piece of equipment on first run of the day to verify water temperature during cage or equipment washing process.
 - 4.2.3.1 Remove one Tri-Temp Tapes strip from sheet
 - 4.2.3.2 Tri-Temp Tapes strips are stored in dirty side cage wash
 - 4.2.3.3 Place Tri-Temp Tapes strips on the following items:
 - 4.2.3.3.1 Plastic item– (e.g., mouse cage, isolator top, bottle)
 - 4.2.3.3.2 Stainless Steel item – (e.g., wire lid)
 - 4.2.3.4 Tri-Temp Tapes strip collection and recording procedure
 - 4.2.3.5 Clean side personnel receiving cages must check that any of the three Tri-Temp Tape indicator strips have turned black (see pictures below)
 - 4.2.3.6 The following water temperatures are achieved when indicator strip turns black as illustrated in the following figure:



4.2.4 Results interpretation.

4.2.4.1 Acceptable results: When wash load reached the minimal required 160 °F indicating that 1, 2 or 3 of the indicators changed color.

4.2.4.2 Unacceptable results: Strip did not change color (see figure below).

4.2.5 Tri-Temp Tapes with changed indicator strip are removed and placed on Cage Washer Tape Temp Log sheet posted in clean side cage wash.

4.2.5.1 Record the date and initial.

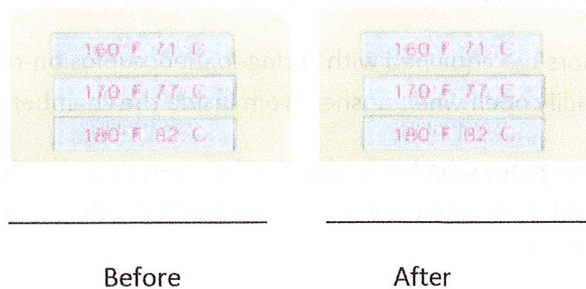
4.2.5.2 There is an additional space for comments if needed.

4.2.5.3 Complete this daily when the cage washers are in operation.

4.2.6 The Facility supervisor or designee retrieves the Cage Washer Tape Temp Log and place in file. All Temp-Tape logs are kept for three (3) years, or more if directed, in binders filed in the Assistant Director office.

4.2.7 Reporting Unacceptable results

4.2.7.1 UNACCEPTABLE results may be indicated by lack of color change on the Tri-Temp Tape strips, indicating that the load did not reach the minimal required temperature of 160 °F.



4.2.7.2 If none of the indicator strips on the temp tape change color, place them to Cage Washer Tape Temp Log. Stop the washing equipment and notify Facility Supervisor and Assistant Director immediately.

4.2.7.3 Unacceptable results need to be confirmed by employing ATP Hygiene Monitoring System and testing 2 items. If results are unacceptable, repair of the cage wash needs to be scheduled and equipment retested using Temp Tape Test. The equipment must have three consecutive passing runs before it can be used.

4.2.8 Alternative solutions of caging and equipment with unacceptable ATP Hygiene Monitoring results:

4.2.8.1 Cages and equipment may be alternately chemically sanitized with an ACF-approved chemical or autoclaved to ensure sanitation.

4.3 Cage Washer Maintenance

4.3.1 Weekly

4.3.1.1 Clean the filters and spray nozzles to keep the machine clean of all debris.

4.3.1.2 Empty the wash tank of recirculated water

4.3.1.3 All external surfaces of the Cage Washer Machine must also be cleaned with the appropriate stainless steel cleaner product.

5. Safety:

5.1 **Door open** safety feature automatically stops washer operation if doors are opened during the cycle. To resume operation, doors must be closed, alarm acknowledged, and START CYCLE button pressed.

5.2 Two **red safety cables** inside the wash chamber (one on each side) immediately stop the washer operation if either one is pulled. To resume operation, alarm must be acknowledged and START CYCLE button pressed.

5.3 Doors are equipped with spring-loaded, explosion-relief type **safety latches** that readily open when pushed from inside the chamber.

5.4 **Emergency stop button(s)**. Washer is equipped with an external emergency stop pushbutton at each end that automatically stops operation of the washer when pressed.

6. Revisions

6.1 Rev 02 – (June 2019) – Updated the safety paragraph.