STANDARD OPERATING PROCEDURES

2. **Types of Cagewash Equipment in each Facility:**

Facility	Type of Cage Washer	Co. Name
ALZ	Tunnel	Basil 6000
ALZ	Cage/Rack	Basil 9500
CPH	Cage/Bottle	Basil 3700
COM	Tunnel	Basil 6000
COM	Cage/Rack	Basil 4600
IDRB	Cage/Bottle	Basil 3700
MDD	Tunnel	Arcadia
MDD	Cage/Rack	Atlantis Evo
PSY	Cage/Rack	Basil 9500
SRB	Cage/Rack	Basil 9500
SRB	Tunnel	Basil 6000 (2)

   Cage and rack washers usually have specialized accessories to wash specific items (e.g., cage racks, bottle rack or pan racks).

3. Daily and weekly cleaning of cage washer screens, periodic removal and/or cleaning of water spray jet valves help ensure that the water spray jet valves will not become clogged with bedding or other debris. To help prevent breakdowns, motor gaskets and electrical components need to be examined and serviced regularly by an experienced specialist. Timers and other gauges should be checked daily to be sure that conditions are being met, which ensures the equipment is properly sanitizing. The Maintenance Support and Cage Wash Personnel perform most of the routine maintenance. Refer to the operation manual for your particular machine for recommended maintenance services and checks.

4. All cage washers are monitored for proper washing and rinsing temperatures to evaluate sanitation by the use of heat-sensitive indicator strips. (See ***SOP# 1004*** entitled ***Monitoring Cage Wash Efficacy)***.

5. All cage washers, including tunnel washers, cabinet washers and cage/rack washers have cycles. Most of the cage washers operate on pre-wash, wash, rinse and final rinse cycles. The pre-wash cycle is run to wet the cages or equipment down. Hot tap water is usually used with this cycle. Wash cycle uses phosphoric acid detergent, usually runs from one minute to four minutes (depending on cage washer). There may be one or two rinse cycles, a recirculated hot water rinse, and the final rinse, which is not recirculated. **Final rinse should reach a temperature of 180^0 F**, lasting (1) one-minute to (5) five minutes depending on cage washer and facility.

6. If the acid cycle is used, then the first rinse is canceled and the acid cycle comes on instead, runs for about (4) four minutes at 160^{0}F, then goes to the final rinse.

7. **Tunnel Cage Washer Components**
   a. ON - touch screen - to start conveyor.
   b. OFF - red emergency-stop button - to stop conveyor.
   c. All tunnel washers ha

f. Tunnel washers have temperature monitor/gauges and gauges for the water. Check these gauges regularly to ensure adequate water and steam pressure are available.

8. **Cage and Rack Washers Components**
   a.

9. Refer to operator manual for additional operating instructions beginning on page 29.

c. Tunnel Washer Maintenance:

1. **Weekly**:
    a. Clean external surfaces.
    b. Inspect and clean filter(s).
    c. Inspect the rinse nozzle for any obstruction.
    d. Drain and clean the tank.
    e. Inspect the refilling nozzle for any obstruction.
    f. Remove washing arms and check nozzles for any obstruction.
    g. Check in line filter for cleaning conditions.
    h. Remove the pre-rinse / rinse arms and check nozzles for any obstruction.
    i. Inspect and clean unloading bay.
2. **Quarterly**:
    a. Check the cage sensor/reflector conditions on the unloading bay.
    b. Check the emergency buttons and bumper.
    c. Check the curtain conditions.
3. **Semi-Annual**:
    a. Servicing procedures as recommended and performed by a trained service technician.
4. For detailed maintenance instructions see page **119 of operator manual**

2. Atlantis Evo (MDD) Operational Procedures for the Cage and Rack Washer –

a. **Before operating unit verify:**
    a. Building electrical supply disconnect **switch (circuit breaker) is ON**.
    2. **Steam and water supply valves are open**.
    3. **EMERGENCY STOP** pushbuttons are pulled.
    4. **Sump filters are clean** and properly installed.
    5. **Detergent supply is available**.
    6. **Printer paper is available**.

b. **Operation of Unit:**
    a. Turn on the main **POWER** switch.
    b. **Acknowledge any alarm(s)** if present and correct. Note, machine status is indicated by control panel and internal LED lamp.
    c. Press **DOOR** pushbutton on Side A control panel to **open door**.
    d. **Load items to be washed**, ensuring that all items are properly loaded.
    e. Close door and keep **DOOR** pushbutton pressed for a few seconds to automatically **lock it**.
    f. Press the **center circle** on the control panel display to access the cycle page and select recipe choice.
    g. Tap **center circle** on control panel to return to pain page
    h. Tap **green start icon** on control panel to start the cycle.
    i. Following cycle completion, the control panel will display **"ACCOMPLISHED"**
    j. Tap the **DOOR** pushbutton or door icon on control panel to **open door and unload items** wearing proper PPE.

c. Cage and Rack Washer Maintenance:

1. **Weekly**:
    a. Clean external surface.
    b. Inspect and clean filters.
    c. Clean nozzles.

f. **Retrieve items on clean side**. **Cautiously open chamber door** to vent out remaining steam vapors. **Allow chamber to cool** a few minutes before removing load. The **load and water are very hot** when door is first opened.

4. **Basil 6000 Tunnel Washer** (COM, SRB)
   a. Front panel of the Basil 6000 Tunnel Cage Washer has a graphic performance data display screen and a set of pushbuttons. The pushbuttons are used to make temperature set point adjustments (SP). See Basil 6000 Series Tunnel Cage Washer Manual.
   b. **Before Operating Unit**:
      1. **Open chamber access doors** and check, making sure chambers are empty. (ham)6.6

f. When desired cycle is selected (cycle name is blinking on display screen), press
TcTwP0 Td48. **CYCLE/START** touch pad. Name of selected cycle appears on screen and remains displayed during safety delay.
g. After safety delay has elapsed, washer automatically progresses through programmed cycles.
h. **Open chamber door** by pressing **DOOR OPEN** touch pad. Leave doors open and allow load to cool before removing.

WARNING: hot steam may escape if door is fully opened. Wear appropriate PPE when chamber contents are hot.

i. Refer to Operator Manual for additional information.

6. **Basil 3700 Cage and Bottle Washer** (CPH, and IDRB) operational instructions:
   a. **Before operating unit verify**:
      1. Building electrical supply disconnect **switch (circuit breaker) is ON**.
      2. **Water supply valves are open**.

accumulated water using squeegees and/or mops, and appropriate lifting techniques. All personnel should use caution when working around electrical components in a wet environment.

2. All personnel that work in cage & equipment sanitation areas will participate in the program's occupational health & safety program to include annual medical evaluation and respirator fit testing as part of the Respiratory pirator fet -2(pi) 0.837 0(2 Tw 475 >>BD1.1o8w 3.272 0

p

9. When lifting items, use proper lifting techniques.

10. Be careful of the conveyor belt on tunnel washers - watch fingers and hands.

VI. DOCUMENTATION

1. Adhesive Temperature Stickers / Cage Wash Temperature Sheets. See ***SOP# 1004,*** entitled ***"Monitoring Cagewash Efficacy"***.

2. Manufacturer's Operating Manuals for specific cagewash equipment-- located in each facility.

VII. REFERENCES

1. Guide for the Care and Use of Laboratory Animals

2. AALAS training manuals

3. Equipment Operator Manuals

Approved: **Date:**