Loyola University Chicago Comparative Medicine Facility

Standard Operating Procedure

SOP Number: 02-18-4109

Service: Research

Operating Section: Husbandry

Unit: CMF

Title: Operation, Validation and Maintenance of the Tunnel Washer

Purpose:

To outline instructions for operation and preventative maintenance procedures of the tunnel washer.

Procedure:

1) Operation:

- a) Confirm that all services to the unit (e.g. steam, hot and cold water, electricity, air supply, and dry/exhaust) are turned on and operational. Confirm that all filter screens, floor grates and spray arms are in place. Turn the **ON/OFF** power selector switch from **OFF** to the **ON** state. On the initial Start Screen press NEXT.
- b) From this screen select OPERATOR.
- c) Select a cycle by pressing the Cycle Button on the touchscreen. Once a cycle has been selected, the operator interface will display the cycle selected in the Cycle Selected location. If the selected cycle is correct, press the **START** button on the touchscreen.
- d) At the final rinse cycle, a temperature of at least 180°F/82°C must be reached to achieve maximum decontamination.
- e) If temperature reaches 180° F/82°C but equipment does not appear clean after a complete cycle, the operator will assess the problem and return the equipment to the tunnel washer for repeat cleaning/sanitization.
- f) At the end of the day, the unit should be turned off. Turn the **OFF/ON** power selector switch from **ON** position to the **OFF** position. The operator interface will be turned off as soon as the **OFF** position has been selected.
- g) If the unit will not be used for an extended period of time, or maintenance has to be done, close all the supply valves to the unit, and position the main electrical supply panel switch to the **OFF** position.

2) Validation:

- a) Once daily, temperature-sensitive tape, such as temp-tape 180° will be affixed to two areas not receiving a direct spray from the washer nozzles.
- b) Tunnel washer settings are to be maintained at routine settings as appropriate to the type of caging.
- c) Temperature sensitive tapes are examined immediately after the caging is removed from the washer. The color strip should be entirely black; if one or more strips are not entirely black, the process for that washer should be repeated. If after the second test, one or more strips are not entirely black, then the washer will have "failed" the validation test. The CMF Operations Manager must be notified immediately and subsequently will contact LUC Facilities. The machine will not be used until the problem has been resolved.
- d) The above checks will be documented on a rack washer validation log.

3) Preventive Maintenance:

- a) Daily (CMF Staff):
 - (1) Prior to the initial startup of the washer, inspect the interior of the wash compartment.

- (2) Pull the screens (six on the side of the unit) and hose them out.
- (3) Open the flip down tray at the front of the unit and hose it out. Do not spray the control panel.
- b) Weekly (CMF Staff):
 - Remove hard water deposits from interior of chamber (use DESCALER cycle).
 - (2) Clean water spots and stains from the exterior of the cabinet with a stainless steel cleaner.
 - (3) Check all water, air and steam fittings for signs of leakage and notify the CMF Operations Manager if repair is needed.

Weekly (Facilities):

- (1) Inspect all of the jets and remove any debris from them by poking a small wire into the jet orifice. If debris is considerable, remove pipe plug located on header manifold and run pump manually to flush out jets. Remove any debris found on or under the pump screen. Check around the door seals and remove any debris if found.
- c) Monthly (Facilities):
 - Lubricate chemical injection pump rollers.
- d) Quarterly (Facilities):
 - (1) Door Assemblies: Verify proper door and switch operation.
 - (2) Controls: Confirm that touch panel operates properly. Verify that all alarms and sensors operate properly, verify that factory recommended settings of controls are in use. Verify temperature display printouts. Verify temperature settings are in accordance with manufacturer's specs/manual.
 - (3) Piping: Inspect and clean strainers. Inspect and clean chamber drain for debris. Verify operation of pressure gauges. Verify that there are no leaks. Apply one ounce of High Temperature grease to the drive cylinder grease fitting.
 - (4) Valves: Check valves. Check all water, air, steam fittings for signs of leakage.
 - (5) Safety: Verify that appropriate signage and operating instructions are present.
 - (6) Testing: Verify that unit has proper labeling. Clean dirt, lint, debris from components; including drains, jets, pump screen and door seals. Remove pipe plug located on header manifold and run pump manually to flush out jets. Check wiring, terminals, and other connections for integrity. Reinstall any panel or cover removed. Run machine through each wash cycle to verify proper operation; check all displays and printouts; retain printout tape: note verification testing on tape, and return tape to Director of Facilities Management.

OFFICE USE ONLY:

APPROVALS

Responsible Official Signature			Date	
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Version #2	Effective Date	Supersedes #1	Original Date	