ITEM 1

Personnel touched equipment or other surfaces located outside of the ISO 5 classified aseptic processing area with gloved hands and then engaged in aseptic processing without changing or sanitizing gloves.

Specifically, during production of Lido/Dex/Hep/Gent/Sodium Bicarbonate Bladder Irrigation Solution lot 051518-1CR for Rx (b) (6), the technician was observed touching non-sterile components and equipment on the cart outside of the ISO 5 classified area and then continuing with aseptic processing without first sanitizing hands with (b) (4) each time or changing gloves.

ITEM 2

Personnel engaged in aseptic processing were observed with exposed hair.

Specifically, during production of Lido/Dex/Hep/Gent/Sodium Bicarbonate Bladder Irrigation Solution lot 051518-1CR for Rx (b) (6), Cefazolin 50 mg/mL Ophthalmic solution lot 151618-1CR for Rx (b) (6), and Tobramycin 14 mg/mL Ophthalmic solution lot 151618-2CR for Rx (b) (6) the technician's hair was observed as not fully covered while working in the ISO 5 hood.
ITEM 3
Equipment was not disinfected prior to entering the aseptic processing areas.
Specifically, the technician was repeatedly observed handling packaged and unpackaged components with bare hands before and while disinfecting the components with (b) (4) immediately before introduction into the pass through.

In addition, during production of Lido/Dex/Hep/Gent/Sodium Bicarbonate Bladder Irrigation Solution lot 051518-1CR for Rx (b) (6), the technician was observed introducing non-sterile pliers into the ISO 5 critical zone without first disinfecting the surface of the pliers that was used to remove the closure of a sterile 100 mL glass bottle.

ITEM 4
The use of sporicidal agents in the ISO 5 classified aseptic processing area was inadequate.
Specifically, the (b) (4) and the (b) (4) used to disinfect the ISO 5 area and the clean room are not effective as sporicidal agents at the specified concentration and contact time.

ITEM 5
Disinfecting agents and cleaning wipes used in the ISO 5 classified aseptic processing areas were not sterile.
Specifically, the (b) (4) the firm prepares and uses in the ISO 5 hood is not sterile.
Non-sterile lint free wipes are used to clean and disinfect the ISO 5 hood. The technician uses these non-sterile wipes that are kept in a stack, with no covering, on a cart in the clean room.
ITEM 6
Your facility was designed and/or operated in a way that permits poor flow of personnel and materials.

Specifically,

The Prep room is unclassified and is where in-house sterilized glassware used in the aseptic preparation of drug products is stored.

The technician was observed to move repeatedly between the ISO 8 classified gowning room and unclassified areas to retrieve components and transit through plastic curtains that are also contacted by employees who are not properly gowned. Between the general pharmacy and the gowning room, and between the gowning room and the Prep room, are plastic curtains that are not cleaned.

Before production of Tobramycin 14 mg/mL Ophthalmic solution lot 151618-2CR for Rx (b) (6) the pharmacist checking the formula worksheets and components was observed without gowning walking from the unclassified general pharmacy through the gowning room (ISO 8) before entering the Prep room to perform the checks and then back from the unclassified Prep room through the gowning room to exit.

Immediately before production of Lido/Dex/Hep/Gent/Sodium Bicarbonate Bladder Irrigation Solution lot 051518-1CR for Rx (b) (6) Cefazolin 50 mg/mL Ophthalmic solution lot 151618-1CR for Rx (b) (6), and Tobramycin 14 mg/mL Ophthalmic solution lot 151618-2CR for Rx (b) (6) the technician was observed donning sterile gloves inside the ISO 5 hood.

ITEM 7
Non-microbial contamination was observed in your production area.

Specifically, white residue was observed on the face panel of the HEPA filter supplying air to the ISO 5 area. In addition, the floor of the ISO 7 clean room has visible dirt, stains, or residue that are not removed during routine cleaning.

Lisa Orr, Investigator
5/22/2018
ITEM 8

Procedures designed to identify and prevent insanitary conditions are not established and followed by your firm. Specifically,

1. Your firm did not ensure appropriate certification of your aseptic processing areas. For example,

a. During certification of your aseptic processing area on 02/12/18, testing showed pressure differential failure between the gowning room and the unclassified general pharmacy. This failure was not corrected until 03/15/18. Between 02/12/18 and 03/15/18, your firm produced approximately sterile drug products.

b. Your aseptic processing areas were certified on 02/12/18 and 08/09/17. However, the certification reports issued indicate that HEPA filter leak testing was not conducted. In addition, the 08/09/17 certification report indicates that a smoke study was not conducted.

c. The smoke study performed in your firm’s ISO 5 hood on 02/12/18 did not assess airflow at the work surface under dynamic operational conditions. The video showed the smoke stream was localized near the middle back of the hood and the tube from which the smoke emanated remained stationary throughout the test.

2. Your firm did not perform appropriate environmental monitoring in your aseptic processing areas. For example,

a. Environmental monitoring of surfaces for microbial contamination is not performed each day after completion of sterile operations in the ISO 5 area. Your firm performs such monitoring only on (b) (4) basis, and after cleaning the surfaces.

b. Technician’s gloves are not monitored for microbial contamination after completion of sterile operations. Glove tips are monitored only on (b) (4) basis, and only the dominant hand is sampled.
c. Your firm's incubator was sent out for repair between January 6, 2017 and February 8, 2017. During that time, no glove or surface sampling or testing was performed either in-house or by an outside laboratory. Between January 6, 2017 and February 8, 2017 your firm produced at least 10 sterile drug products.

d. Your firm does not monitor differential pressure between the ISO 8 classified gowning room and the unclassified general pharmacy, and between the ISO 8 classified gowning room and the unclassified Prep room, before or during sterile drug production.

3. Your media fills are not representative of your firm's routine aseptic processing practices and do not incorporate appropriate worst-case activities and conditions that challenge your aseptic operations. For example, your firm's procedure does not describe use of the same equipment, glassware, and container-closure system your firm uses, and does not represent the largest volume of drug products you aseptically produce.

4. Biological indicators are not used to verify the adequacy of the sterilization cycle of your firm's glassware used in sterile operations. In addition, the effectiveness of this cycle to depyrogenate the glassware has not been verified through performance of an endotoxin challenge. Additionally, you have no data to support that your glassware remains sterile throughout the storage period.

ITEM 9

The ISO 5 classified aseptic processing areas and segregated production areas surrounding the ISO 5 classified aseptic processing area contained dust-collecting overhangs without adequate and frequent cleaning.

Specifically, there are horizontal, flat surfaces above the ISO 5 hood. Those are not cleaned during routine cleaning, and the hired cleaning services do not include the ISO 5 hood. In addition, there are other such surfaces in the ISO 7 clean room including but not limited to the top of the pass through.