DURING AN INSPECTION OF YOUR FIRM WE OBSERVED:

OBSERVATION 1

Aseptic processing areas are deficient regarding the system for monitoring environmental conditions.

Specifically,

A. Environmental monitoring (EM) at your firm is inadequate in that it was not performed after aseptic production runs or at least daily. 2014 records show that contract EM services of the IV room and anteroom last occurred [b] [4]. Additionally, you did not have established written procedures governing EM at your firm that address frequency of performance, sampling locations, and action limits for laboratory investigations.

B. You acknowledged that personnel monitoring did not occur at your firm and no approved written procedures governing personnel monitoring were established.

C. There were no magnahelic gauges to measure differential pressure between the cleanroom and the anteroom. As such, no positive pressure was established to facilitate adequate air pressure between the two rooms.

OBSERVATION 2

Aseptic processing areas are deficient regarding the system for cleaning and disinfecting the equipment to produce aseptic conditions.

Specifically,

1. Cleaning of the ISO5 hood and the [b] [4] in the cleanroom and anteroom, respectively, was not documented. Due to the lack of records, approved written cleaning procedures, and the inability to observe aseptic production during the current inspection, it could not be determined that appropriate cleaning methods and sporicidal agents were used to clean the walls and work surface of the ISO 5 hood.

2. Lint-free wipes, [b] [4], and [b] [4] were observed in the compounding lab but it cannot be determined if these items were used to disinfect supplies introduced into the cleanroom since no cleaning
OBSESSION 3

Time limits are not established when appropriate for the completion of each production phase to assure the quality of the drug product.

Specifically,

Hold times were not established for [redacted] in-process materials used for the production of 17-Hydroxyprogesterone, HCG, Sodium Tetradecyl, Laureth-P, Trimix, and other sterile drug products produced from [redacted] components. There are no written procedures governing hold times and there is no data to support any hold times used in aseptic drug production.

OBSESSION 4

Procedures designed to prevent microbiological contamination of drug products purporting to be sterile do not include validation of the sterilization process.

Specifically,

A. You acknowledged that commercially available [redacted] was used for initial cleaning of equipment [redacted] at your firm. In particular, you confirmed that [redacted] cleaned via this process were used to hold bulk solutions containing non-sterile components that were later incorporated into finished sterile drugs. The [redacted] used for [redacted] cleaning was not qualified and the process used to render [redacted] depyrogenated was not validated.

B. Media fills (process simulations) were not performed at least semi-annually inside the ISOS hood. As such, you cannot demonstrate that you and your staff can perform sterile operations under conditions that closely simulate the most challenging and stressful conditions encountered during aseptic procedures.

C. Pharmaceutical [redacted] were observed in the "Compounding Lab", but available compounding logs do not demonstrate they were used or that [redacted]

D. The refrigerator in the "Compounding Lab" used to store sterile drug products produced from non-sterile components is not real-time monitored for temperature fluctuations. On 2/25/15, the finished drug products Methylcobalamin 1000mcg/ml (RX [redacted] BUD 7/29/15) and Trimix 50mcg/ml (RX [redacted] BUD 7/26/15) were observed in the refrigerator. Temperature monitoring was manually recorded for [redacted] only during the month of February 2015.

E. Smoke studies were not performed and documented for the ISO 5 hood in the cleanroom.
OBSERVATION 5

Each batch of drug product purporting to be sterile and pyrogen-free is not laboratory tested to determine conformance to such requirements.

Specifically,

You did not perform sterility or endotoxin testing on any finished lots of sterile drugs produced and distributed by your firm. Finished drug products produced at your firm that were prepared from included: 17-Hydroxyprogesterone, Human Chorionic Gonadotropin, Cyanocobalamin, Methylcobalamin, Sodium Tetradecyl Sulfate, Laureth-P, Trimix, Dexamethasone, and Diazepam (vet use). Other sterile drug products included vancomycin, tobramycin, and cyclosporin (vet use).

OBSERVATION 6

Each lot of a component liable to objectionable microbiological contamination is deficiently subjected to microbiological tests before use.

Specifically,

You do not have written procedures governing the acceptance of incoming lots and vendors of non-sterile components. Moreover, these components (including powder drugs) are not tested prior to incorporation into finished sterile drug products.

OBSERVATION 7

There is no written testing program designed to assess the stability characteristics of drug products.

Specifically,

There is no approved stability program procedure for the establishment of Beyond Use Dates (BUDs) assigned to sterile drug products. Sterile products received BUDs without appropriate justification. For example, the labels of the finished drug products Methylcobalamin 1000mcg/ml (RX produced 1/29/15; BUD 7/29/15) and Trimix 50 mcg/ml (RX produced 1/26/15 BUD 7/26/15) were observed in the refrigerator of the "Compounding Lab" on 2/25/15. 6 month BUDs were provided for these finished sterile products. Additionally, you acknowledged that no preservatives are used for your sterile produced products.
OBSERVATION 8

The flow of components through the building is not designed to prevent contamination.

Specifically,

Cross-contamination risk is not proceduralized and managed appropriately regarding the handling of non-sterile powder drug components.

1. Non-sterile powders including (but not limited to) [b](4) are scooped into plastic boats using smartSpatulas. This process occurs in an unclassified area of the "Compounding Lab".

2. The plastic boats are then weighed in an [b](4) balance that has rust along the interior metal seams and appears to have hardened powder residue along the interior surfaces.

3. The [b](4) balance has no documentation of routine cleaning to mitigate the risk of cross-contamination.

OBSERVATION 9

Testing and release of drug product for distribution do not include appropriate laboratory determination of satisfactory conformance to the prior to release.

Specifically,

Sterile drugs produced at and distributed by your firm were not assay tested for potency. As such, there is no assurance that these distributed drug products produced the desired maximal effect for patients.

OBSERVATION 10

Each batch of drug product required to be free of objectionable microorganisms is not tested through appropriate laboratory testing.

Specifically,

You did not perform sterility or endotoxin testing on any finished lots of sterile drugs produced and distributed by your firm. Finished drug products produced at your firm that were prepared from [b](4) included: 17-Hydroxyprogesterone, Human Chorionic Gonadotropin, Cyanocobalamin, Methylcobalamin, Sodium Tetradecyl Sulfate, Laureth-P, Trimix, and Dexamethasone.