TMDA/DMC/MCIE/F/001

TANZANIA MEDICINES AND MEDICAL DEVICES AUTHORITY

EMCURE PHARMACEUTICALS LTD, MAHARASHTRA, INDIA

PUBLIC GMP INSPECTION REPORT

12th December, 2020

Part 1: General information about the company

Manufacturers details	
Name of manufacturer	Emcure Pharmaceuticals Ltd
Corporate address of manufacturer	Plot No. P-1 & P-2, I.T.-B. T Park, Phase II, M.I.D.C, Hinjwadi, Pune-411 057, Maharashtra, India
Inspected site	
Name & address of inspected manufacturing site if different from that given above	Plot No. P-1 & P-2, I.T.-B. T Park, Phase II, M.I.D.C, Hinjwadi, Pune-411 057, Maharashtra, India
Unit/ block/ workshop number	Not applicable
Inspection details	
Date of inspection	21st to 23rd November, 2018
Type of inspection	Renewal GMP Inspection
Introduction	
General information about the company and site	Emcure Pharmaceuticals Limited is located at plot No. P-1 & P-2, I.T Park, Phase II in an industrial zone developed by Maharashtra Industrial Development Corporation (MIDC). The facility is engaged in manufacturing of general oral solids in form of capsules, tablets and suspension, powder for reconstitution, general sterile preparation in form of liquid for injection and oncology products in form of liquid for injection The facility was issued with manufacturing license by the Drug Controller for the State of Maharashtra, India
History	The facility was issued GMP certificate by the local NMRA. The facility had been inspected and approved by other NMRA including Health Canada - Canada, EU-Slovenia, GCC, ANVISA- Brazil, MHRA-UK and SAHPRA- South Africa.

	This was the renewal inspection conducted to verify if the facility still operated under GMP requirements following the previous inspection that was conducted in 2014.
Brief report of the activities undertaken	
Areas inspected	The inspection focused on external surroundings, utilities, production areas starting from incoming raw material warehouse, manufacturing areas to the finished products warehouses, quality control laboratory and documentation
Restrictions	none
Out of scope	none
Production lines inspected by TMDA	General oral solids in form of capsules, tablets and suspension, powder for reconstitution, general sterile preparation in form of liquid for injection and oncology products in form of liquid for injection
Abbreviations	**Meaning**
AHU	Air Handling Units
ANVISA	Agencia Nacional de Vigilancia Sanitaria
EAC	East Africa Community
GCC	Gulf Cooperation Council
GMP	Good Manufacturing Practice
HEPA	High Efficiency Performance Air
HVAC	Heating, Ventilation and Air Conditioning
MCC	Medicines Control Council
MCDP	Multi-Column Distillation Plant
MHRA	Medicines and Health care Products Regulatory Agency
MIDC	Maharashtra Industrial Development Corporation
NMRA	National Medicines Regulatory Authority
SOP	Standard Operating Procedures
TMDA	Tanzania Medicines and Medical Devices Authority
TPIR	TMDA Public Inspection Report

Part 2: Brief summary of the findings and comments

1. Personnel

The manufacturing plant had sufficient number of qualified and experienced personnel to perform activities carried out at the facility. Key technical positions of personnel in quality assurance, production and quality control were identified in company organization chart. Individual responsibilities were clearly defined in their job description and the quality control Head was confirmed to be working independent from the production head.

Personnel received induction training and on job training on GMP as per company procedure and training program. Medical examination was performed for newly employees and on routine basis for all working employees at every four months.

2. Premises

There were three blocks for oral solid dosage forms, oncology products and sterile products. All the blocks were properly designed, located, constructed and maintained to minimize the risk of cross contamination and permit effective cleaning.

i. Layout and Design

The layout for all blocks was designed to provide unidirectional flow of manufacturing process with separate entries for personnel and materials.

The buildings were constructed using reinforced concrete cement foundation, smooth finish and modular panels partitions. Flooring in the process area was in kota stone with mirror – finished shine and joints were filled with cement. Walls and ceilings were painted with white polyurethane paint and corners between wall to wall, floor to wall and wall to ceiling were provided with covings. Material warehouses were adequate in size, well equipped and properly maintained to allow proper storage of materials under quarantine, release and rejected areas.

ii. Sanitation and Hygiene

The premise and its surrounding environment were clean and properly maintained. Separate changing rooms for ladies and gents were available and equipped with cross over benches, hand sanitizer, SOP and pictorial presentation for gowning and de-gowning procedure.

The floor, walls and the ceilings in production and storage areas had smooth finish to facilitate effective cleaning and minimized the risk of cross contamination. Validation Master Plan, Cleaning Validation protocol and reports, SOPs for cleaning different areas and equipment were availed and found to be satisfactory. The personnel hygiene was highly observed and special gloves were provided to employees handling products which were toxic in nature.

3. Production

Manufacturing activities were carried out in three dedicated blocks for oral solid dosage forms, sterile preparation and oncology products. Raw material warehouse had different sections for storage of packaging materials, printed packaging materials, and raw materials. Raw materials which required special storage condition were kept in a small room at 2°C – 8°C.

All incoming raw materials were received and verified as per procedure. Separate man and materials entry were provided to the sampling room and dispensing rooms. Sampling was done under lamina air flow and materials were properly stored. Special room was available for vial inspection and washing. Vial washing was done using automatic vial washing machine then de-pyrogenated prior to vial filling.

Filling and sealing of vials were performed in isolators and adequate controls were in place for ensuring and maintaining desired cleanliness and hygiene level. The filling process was done by an automatic machine The vaporized hydrogen peroxide (VHP) generator was available for sterilization of operators.

Generally, manufacturing processes were initiated as per the BMR, sequence of activities was followed as per procedure and properly recorded. In process control checks were performed within the production area and records maintained in BMR and BPR.

4. Quality Control

The Quality Control Laboratory comprised of two departments; chemical and microbiology department. The chemical department had instrument laboratory and wet chemistry with sufficient number of qualified analysts. The laboratory was well equipped with various equipment and instrument which were qualified and calibrated. SOP and records for qualification of analysts together with reference and working standards storage conditions were checked and found to be appropriate.

The Microbiology department was equipped with sufficient number of microbiologists to carry out sterility test, bacterial endotoxin test and environmental monitoring test. Separate rooms for media preparation, storage, sterilization and decontamination were in place to minimize risk of contamination.

Five stability chambers were available and were set at of 25 ± 2^0 C/60 ± 5% RH; 30 ± 2^0 C/65 ± 5% RH; 40 ± 2^0 C/75± 5% RH; 30 ± 2^0 C/75 ± 5% RH; and 2^0 C - 8^0 C storage conditions.

5. Equipment

Sufficient number of production equipment and machines were available in the production area, quality control laboratory and in utilities. Available equipment was suitably designed, located, installed, qualified and maintained to suit the operations carried out. Qualification reports, preventive maintenance records, calibration status label and SOPs for cleaning were availed and found to be appropriate.

6. Water Treatment System

Water treatment plant and distribution system was suitably designed, constructed and maintained to ensure quality water was produced. Potable water was sourced from municipal.

Purification of water was done through several stages including pre-treatment phase of potable water, ultra-filtration, reverse osmosis and electrode-ionization, re-circulation distribution loop and U.V. sanitization. Produced purified water (PW) was used as feed to generate water for injection and for washing production equipment and vials. The capacity of the system was 3000 L per hour.

Water for injection (WFI) was generated by passing PW through Multi-Column Distillation Plant (MCDP). The generated WFI was used for batch manufacturing and final rinsing of process equipment, vials and as feed water to pure steam generator. Water produced was monitored throughout the whole treatment process and water monitoring records were reviewed and found to be satisfactory. SOP and records for maintenance of purifying water system was in place.

7. Heating, Ventilation and Air Conditioning

HVAC system was suitably designed, installed and qualified to maintain adequate temperature, relative humidity and pressure differential within the facility to minimize the risk of contamination. The system had adequate number of AHU servicing oral solid

dosage form block, sterile preparation block and oncology block. All AHUs supplying air to processing areas were provided with primary filter, secondary filters and terminally located HEPA filters. Calibrated magnehelic pressure gauges were available for each AHUs across filters to monitor its efficiency. Schematic diagrams, arrows showing direction of flow of air and utility maintenance records were available and verified. Records reviewed for system qualification and preventive maintenance program proved that the HVAC system was functional, well monitored and properly maintained.

8. Document Review

A documentation system was in place to guide production and control of products. These included Validation Master Plans (VMP); Standard Operating Procedures; Batch Manufacturing and Packaging Instructions and records; specifications of starting materials, packaging materials, packaging components, intermediates and finished products; standard testing procedures, analytical records and certificates of analysis; qualification and validation protocols and reports. There were corresponding records in form of reports, forms, checklists, logbooks, registers maintained as evidence of compliance with the procedures and specifications.

Part 3: Conclusion

Based on the areas inspected, the people met and the documents reviewed, and considering the findings of the inspection, including the observations listed in the inspection report, **Emcure Pharmaceuticals Ltd, Plot No.** P-1 & **P-2, I.T.-B.T Park, Phase II, M.I.D.C, Hinjwadi, and Maharashtra, India** were considered to be operating at **an acceptable** level of compliance with EAC Compendium of Good manufacturing practices for **general oral solids in form of capsules, tablets and suspension, powder for reconstitution, general sterile preparation in form of liquid for injection and oncology products in form of liquid for injection**.

This TPIR will remain valid for three (3) years from the date of approval for GMP compliance, provided that the outcome of any inspection conducted during this period is positive.

Part 4: References

1. East African Community Good Manufacturing Practice Compendium, 2014.
2. TMDA *Good manufacturing practices inspection manual and SOPs*, Tanzania Medicines and Medical Devices Authority, Dar-es-Salaam, Tanzania.
3. Tanzania Medicines and Medical Devices Authority Act, Cap 219