

**Notices for the application of Plant master file” Form C-2****PMF Checklist for Foreign Pharmaceutical Manufacturer**

**Form C-2: Sterile Product (Simplified)** (For the expansion of manufacturing site, the items which are marked with asterisk are required, and the relevant documents shall be enclosed.)

*To which case be applied : Sterile medicinal products/ ATMPs/ Biological medicinal products/Biological medicinal substances*

<b>Applicant:</b>	<b>Receipt No.</b>	<b>Case Number</b>
Item	Please complete the checklist item by item and indicate the attachment numbers or the page numbers of <b><u>submitted documents.</u></b>	reviewer comment
<b>2.1 Pharmaceutical Quality System (Chapter 1 of Part I and Annex1, Annex 2 and 3)</b>		
2.1.1 Describe the product release procedure.		
2.1.2 For product with short shelf-life (such as radiopharmaceuticals, advanced therapy medicinal products, etc.) and which is released before completion of all quality control, describe alternatives methods (such as rapid microbiological methods) of obtaining equivalent data to permit batch certification; procedures for different stages of release shall also be described.		
2.1.3 Briefly describe the application of Quality Risk Management (QRM) on medicine manufacturing. For the application of sterile products, QRM procedures shall ensure protection of the final product from the contamination of microbial, particulate and endotoxin/pyrogen. QRM priorities should include appropriate design of the facility, equipment and processes, followed by the implementation of well-designed procedures, and the application of monitoring systems.		
*2.1.4 Describe the implementation and periodic review process of Contamination Control Strategy (CCS), and outline the elements covered by CCS. (For processes such as FFS, BFS, lyophilization, aseptic connections, and single-use systems (SUS), please also refer to Annex 1 requirements 8.100, 8.114, 8.123, 8.129, and 8.132 respectively.)		

2.2 Organization and Personnel (Chapter 2 of Part I and Annex 1)		
2.2.1 Describe the procedure of personnel qualification, including training programs for personnel employed in sterile product manufacturing areas, and qualification protocols for personnel gowning procedures relevant to aseptically prepared products		
2.2.2 For sterile product manufacturer, describe in detail the requirement of clothing, the gowning procedure and the washing procedure of clothing for each grade of clean area.		
2.3. Premises, Facilities, Equipment, and Production (Chapters 3 and 5 of Part I and Annex 1)		
*2.3.1 Layouts showing the flow of personnel, materials, products, and waste, <b>including the locations of autoclaves, depyrogenation ovens/tunnels, sterile filtration, lyophilizers, isolators/RABS, etc.</b>		
*2.3.2 Describe whether restricted access barrier systems (RABS) or isolators are used in order to reduce the need for critical interventions into Grade A areas, such as robotics and automation of processes. <b>Additionally, any alternative approaches to the use of RABS or isolators should be justified.</b>		
*2.3.3 Heating, ventilation and air conditioning (HVAC) systems		
*2.3.3.1 Briefly describe the HVAC systems in production area.		
*2.3.3.2 Layouts of clean room specified classification in production areas (such as A, B, C, D, CNC, etc.).		
*2.3.3.3 Describe pressure differences between adjacent rooms and indicate-air-flow directions in the layout of production area, <b>including isolators/RABS.</b>		
*2.3.4 Water systems		
*2.3.4.1 Describe water treatment system (including the schematic drawings)		
*2.3.4.2 Describe the disinfection <b>and sterilization</b> of water treatment units and pipelines.		
*2.3.4.3 Describe the monitoring program of the water (including sampling plans, frequency, test items and acceptance criteria).		
*2.3.5 Describe the type(s) of gas(es) that come in contact with products during the manufacturing process and the monitoring program thereof. <b>For the application of terminally sterilized products, the gas or steam used for product sterilization shall also be included.</b>		

<b>*2.3.6 Environmental control in production area</b>		
<b>*2.3.6.1</b> Describe the environmental monitoring program in the production area, such as temperature/humidity, particles, microorganisms, and personnel. <b>Also, describe method used for the trend analysis in environmental monitoring.</b>		
<b>2.3.6.2</b> Where apply for the aseptic preparation, give a brief description for the procedure of Aseptic Process Simulation (APS) (including but not limited to the frequency of implementation, the categories of the production lines, etc.).		
<b>*2.3.6.3</b> Describe the cleaning, disinfection and <b>fumigation</b> procedure in the production area, and list the disinfectants used and the rotation frequency. <b>Disinfection should include the periodic use of a sporicidal agent.</b>		
<b>*2.3.7</b> List of major manufacturing equipments (including weighing, manufacturing processing, packaging, and storage)		
<b>2.4 Production and Specific Technologies</b>		
<b>*2.4.1</b> Flowchart of major manufacturing steps for the applied dosage form/product/manufacturing process in this case; and indicate the grades of the production area, major equipment, process parameters and in process control items. <b>If applying for products using a specialized techniques, please specify the equipment/systems involved, such as Form-Fill-Seal (FFS), Blow-Fill-Seal (BFS), closed systems, single-use systems (SUS), etc.</b>		
<b>*2.4.2</b> For application of aseptic preparation processes, describe the design of the filtration system, including considerations for additional filtration as close as possible to the filling point using aseptic filters.		
<b>2.4.3</b> Describe the procedure for container integrity test (including the sampling plan, frequency, and test methods), and describe the inspection procedure for extraneous contamination or other defects of all filled containers.		
		<b>Signature (including date of signing)</b>