When Does GMP Matter In Non-GMP Settings?

Appendix 1

Baseline Requirements for Principles of GMP

General Controls

- Develop written procedures/work instructions for manufacturing, encompassing personnel training, equipment maintenance, and relevant testing.
- Ensure employees receive training in GMP principles and understand their responsibilities for maintaining a GMP-compliant manufacturing environment.
- Implement control measures for material quality and storage.
- Maintain comprehensive and accurate records of all manufacturing processes, incidents, and non-conformities.
- Maintain manufacturing facilities, equipment, and utensils to minimize contamination risks.

Quality Management/ Oversight

- Quality assurance verifies adherence to procedures applicable to the project, facility, and staff.

Personnel Training

- Subject matter experts and quality assurance collaborate to establish training requirements, which must be validated by the department manager and QA before project commencement.

Documentation & Records

- Ensure documentation is traceable and legible, with all methods, procedures, and references accurately identified.
- Document any changes to methods or procedures after discussion with line management.
- Adhere to good documentation practices.

Product Release

- Establish product specifications before manufacturing.
- Conduct a thorough review of documentation, including manufacturing and analytical data by a technically responsible individual and quality management.

Change Management

- Track, trace, assess, and review all changes, with final review for completion, accuracy, and compliance by quality.

Deviations/ Investigations/CAPA

- Track, trace, and appropriately assess deviations or investigations, with quality approval required for all related documentation.
- Evaluate CAPA requirements on a case-by-case basis and implement as necessary.

Self-Assessment

- Quality oversight through documentation review is considered sufficient; no formal self-assessment mechanism is deemed necessary.

Quality Agreements

- Third-party testing or manufacturing should be governed by a written agreement outlining critical quality expectations, though a separate quality agreement may not always be required.

Facilities

- Ensure facilities are suitable for their intended use, facilitating cleaning and maintenance and preventing contamination.

- Critical utilities should be appropriately qualified or monitored for use by humans.
- Perform a risk assessment against Phase-1, FDA Guidance for facility adequacy and contamination control, implementing mitigating measures as necessary.
- Conduct a risk assessment for effective cleaning and contamination prevention in the facility.

Equipment

- Commission, calibrate, and monitor equipment as required for suitability.
- Qualify computerized systems for intended use.
- Preferably, utilize dedicated equipment or verify cleaning after each clinical manufacturing run if dedicated equipment is not available.

Materials

- Assess materials using a risk-based approach identifying critical reagents.
- Maintain material traceability, storage, and integrity verifying against vendor-issued certificates of analysis.
- Adhere to storage and expiration recommendations.
- Minimize the use of animal/human-derived raw materials with additional safety certifications as necessary.
- Perform additional testing for critical materials based on viral safety assessment.

Production

- Conduct process simulations for aseptic cell processing.
- Implement low bioburden practices.
- Ensure area clearance, segregation, and labeling of products, materials, components, and equipment.

Laboratory Controls

- Preferably conduct testing in a GMP-compliant laboratory.
- Assess and qualify research labs for analysis if necessary.

Packaging/Labeling

- Ensure appropriate label stock based on storage conditions, documenting labeling operations.

Storage and Delivery

- Establish procedures for the chain of custody for material manufactured in non-GMP workspaces, with predefined storage and prompt material transfer.