1.0 Purpose

The purpose of this procedure is to establish a system to evaluate all changes that may affect the production and control of product. This procedure describes the process for the identification, documentation, appropriate review and approval of changes. This will encourage changes toward continual improvement resulting from knowledge gained during the product's lifecycle.

2.0 Scope

This procedure will apply to, but not limited to, changes in raw materials, specifications, formulations, analytical methods, facilities, support systems, equipment, processing steps, labeling, packaging materials and computer software/hardware.

3.0 Responsibility

The Quality Unit has overall responsibility for managing the Change Control System. Quality will review, approve and monitor all change request and activities.

Area Manager is responsible for approving the initiation of a change request.

Any employee may initiate/request a change.

4.0 Safety Considerations

PPE requirements will be observed in designated areas.

Safety is a condition of employment. Employees are not authorized to work in an unsafe manner and are prohibited from harming the environment of the facility or community.

5.0 Materials/Equipment

N/A

6.0 Procedure

A controlled change is warranted when data analysis or other information reveals an area for improvement. Unlike a Deviation *(Deviation Reporting Q12-PR-100-024)* where there is a non-permanent departure from approved quality procedures, policies, processes that is a one-time, temporary event, a controlled change is long-term or permanent. These changes must be controlled and documented to ensure that desired attributes of the finished product will continue to be met. Any change to the following must be approved before the change is made:

- Changes affecting company procedures and systems within the Quality System
- Changes affecting production equipment performance
- Changes affecting product quality

The Change Control System has 5 distinct elements:

1. Reason for the proposed change including a description of the proposed change.
2. Evaluation or impact of the change on product quality, including documents affected and actions proposed.
3. Independent approval of the change before implementation.
4. Description of actual change made.
5. Review of the change after implementation.

6.1 Requesting a Change

All changes are recorded and managed using the *Change Control Request* form *(Q13-PR-100-F015b)*. The change form is a controlled record once completed.

The initiator/requestor describes the proposed change and the justification for the change in the *Description of Change* section. All documents and equipment affected must be listed on the change form. Attach copies of all impacted documents, highlighting the proposed change.

Forward the *Change Control Request* to the area manager for approval to initiate the change.

Then send the *Change Control Request* to the Quality Unit so that a unique identifier can be assigned to the change request *(Change Control Logbook, Q13-PR-100-F015a)*, a responsible owner identified and for evaluation.

Changes are not to be made until they are approved except for E*mergency Change Control*. An emergency change is an unplanned change of a piece of equipment as a result of an emergency, which needs to be repaired immediately in order to maintain personal or environmental safety or preserve the quality of the product. The change may be formalized after the replacement/repair.

6.2 Evaluation

The Director of Quality (or Designee) will review the request and evaluate the potential impact of the proposed change on the quality of the product. The evaluation will be conducted with input from area experts / accountable area leaders (Production, Engineering, and Maintenance). A determination will also be made as to whether a validation or re-validation is required (see *Validation Q13-PR-100-018).* Re-validation should be performed following a change that could have an effect on the process, procedure, quality of the product and/or the product characteristics.

The request will be classified to determine the level of testing, validation and documentation needed to justify changes to a validated process.

Changes will be classified as *minor* or *major* depending on the nature and extent of the changes and the effects these changes may impact on the process.

- Minor – a change not expected to have a change on product quality.
    - Replacement of a piece of equipment by another with identical characteristics and function (same material of construction, size, type, etc. but not necessarily from the same manufacturer). Also known as “Like-for-Like” change.
- Major – a change expected to have a change on product quality. Changes with an uncertain impact level should be handled as major impact changes.
    - May include important repairs and maintenance work, such as replacement of major parts of equipment.
    - Rearrangements in manufacturing areas and/or support systems may result in changes in the process and as a consequence, revalidation/requalification may be necessary.

A *Technical Change* is a planned modification (widening, replacement, removal, addition) with respect to qualified production equipment. To determine the criticality of a technical change, consider the following criteria:

If the component to be changed.....

- can directly contact the product or product components and the change is not a “like-to-like” change;

- can directly affect the product quality by normal operation or control (e.g. impurity profile, crystal form and size, residual solvent or stability;
- indicates and records alarm functions critical to the process;
- is used to record, output or archive data for production records or labels and other cGMP documentation;
- is used to demonstrate compliance with the registered process;
- can influence quality and performance of support systems (e.g. water, steam, etc.);
- is used to ensure access control to critical data or functions (user identification and authenticity);
- is used for critical calculations (e.g. analytical data that are relevant for product release);
- is used to control the production process;
- is used to give information about the quality of the product (e.g. printers for process related data);
- is used to control maintenance or calibration of critical equipment;

then, the change may have an impact on product quality and should; therefore, be carefully assessed and reviewed before implementation.

Other types of changes can include, but not limited to:

- Raw Material Suppliers (see *Critical Vendor Qualification Program Q12-PR-100-023)*
- Procedures, Policies, Forms (see *Document Control Q12-PR-100-002)*
- Specifications

6.3 Approval

Upon approval of the change request, Quality will notify the requestor that the requested change may be implemented (via the receipt of a copy of the approved *Change Control Request* form). Quality will retain the original copy.

A change to an existing procedure/process may be deemed unnecessary and subsequently denied. If denied, a copy of the original form will be returned to the requestor with an explanation regarding denial. The original form will be maintained within the cGMP Library for a minimum or two years.

6.4 Implementation

The change control owner (may be same as requestor) records on the *Change Control Request* form when the actions have been implemented and attaches relevant documentation (re-validation, new vendor qualification, etc.). There should be a complete description of the change

made. The Director of Quality (or Designee) and the area experts / accountable area leaders will review the change form and attached documentation, approve and sign-off for closure.
If the change actions:

- have been completed satisfactorily, the change control is closed out.
- are not satisfactory or further actions have been required, then the change request remains open. Changes are reviewed until satisfactory progress has been made and the change control is closed out.

Whenever possible, timelines for completion of work is to be specified in the Implementation Plan so as to target a Change Control closure date within 45 days. Any Change Control Requests that cannot be completed within 45 days must be reviewed by Quality Assurance who will monitor the activities of the Change Control Request to ensure progress occurs in a timely manner.

Ensure that all documents affected by the change are revised following the *Document Control* procedure.

If changes require retraining of affected employees, training must be documented and completed before the change request is closed out.

6.5 Review of Effectiveness

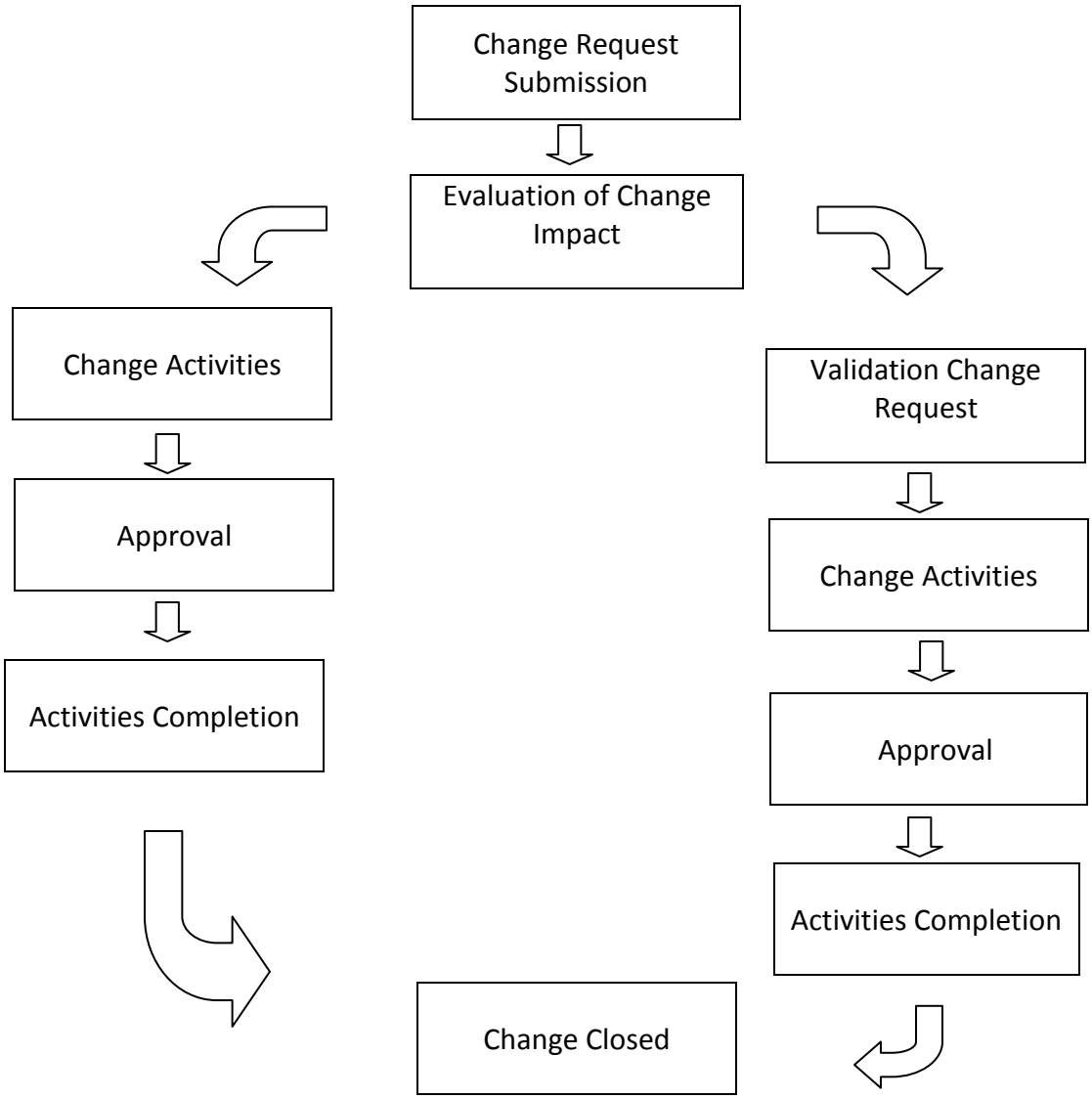
After change has been implemented, there may need to be an evaluation of the first product produced or tested under the change.

The effectiveness of the Change Control System will be reviewed using the following data:

- Total number of change requests/year
- Number of completed change requests/year
- Change type / department involved
- Duration of procedure from initiation to closing
- Number of deviations/year
- Number of complaints/year
- Number of OOS/year

6.6 Records

Closed *Change Control Request* forms and supporting documentation will be maintain by the Quality Unit and filed in the cGMP Library for at least four years.



7.0 Reference Documents

Change Control Logbook	*(Q13-PR-100-F015a)*
Change Control Request	*(Q13-PR-100-F015b)*
Deviation Reporting	*(Q12-PR-100-024)*
Validation	*(Q13-PR-100-018)*
Critical Vendor Qualification	*(Q12-PR-100-023)*
Document Control	*(Q12-PR-100-002)*

8.0 Change Information

New Document