# Supply chain management

Quality management principles. There are 7 mgt principles focussed in QMS.

- 1. Customer focus;
- 2. Leadership;
- 3. Engagement of people;
- 4. Process approach; Imp
- 5. Imrovement;
- 6. Evidence-based decision making;
- 7. Relationship management.

Of these seven one is Relationship management is all about how the organization manages the external organization who provide service to the organization. This may be a supplier who provides materials or an outsourced agency who carry out some activities for the organization (Example is a part of production activity is outsourced to an agency because of various reasons (may be the expertise is better or cost is lower or there is space constraint in the organization or labour intensive job difficult for the organization to manage and soon). Calibration is a specialized activity and is outsourced by many organizations.

The processes considered in supply chain management are

External providers,

Transporters

Inward receipt, acceptance, storage and issue

Finished goods warehouse management

Transport and delivery to customers.

**External Providers:** 

#### **Selection process:**

Organization has to establish criteria for selection of suppliers.

Many organizations follow one or more of the following criteria:

Brand name of product

Logistical comforts.

Distance from works to supplier end/warehouse (this decides the lead time from purchase order release to receipt of product)

Price factors

Supplier ability to handle the volume of business organization is anticipating

Ethics and integrity of supplier organization

Product quality

Delivery lead times.

Compliance to all legal requirements

### How to assess a supplier after selection?

Vendor development technical team visits supplier and evaluates to what extent QMS is in place at supplier organization.

Physical verification of infrastructure facilities, Laboratory / inspection capabilities are assessed.

Production facilities are evaluated by the team to understand technical capabilities.

Product inspection and testing are verified. Rejection levels (incoming, in process and final inspection plus customer complaints) are assessed.

Generally a checklist is used for evaluation and marks are provided for each parameter verified.

Minimum marks required for qualifying a supplier is also stated.

When satisfactory results are not available at supplier end, depending upon the parameter time is given to supplier to come back on those points.

After evaluation, when score is meeting norms, three/ four or five trial orders are placed with supplier and the products supplied are evaluated. When supplies consistently meet all requirements the supplier is approved and name is registered in approved supplier document. When failure is noticed organization decides whether to give more opportunity or not.

Transporter from supplier to organization. Generally it is left to supplier to select and provide transportation. Conditions are laid down to supplier on terms and conditions to which transporter has to comply with.

Continued suitability of approved vendor. Once in a month feedback is given to supplier on performance with respect to product quality, delivery and service. If any additional specific parameter is required the same is also communicated to supplier.

When supplier fails to meet requirements repeatedly organization decides what is to be done.

# Communication

Communication to suppliers are requirements must be clear covering product specification supported by drawing and or sample as per need, Delivery time, Quantity required, product acceptance criteria on receipt plus rate and other commercial details.

When verbal order is placed due to urgency, regularise the same by sending a order placement document (Purchase order).

# Disputes

When non-conformance is noticed when ordered item is received, document the issues and resolve with supplier. Also obtain action plan from supplier for corrective action and how the similar issues would be avoided in future supplies.

When product is stored (incoming and outgoing) at Stores and FG warehouse adequate precautions are taken to preserve the product quality, preserve the identification details and monitor shelf life items by following first in first out procedure.

For transportation of products organization has to select transporters by following procedure similar to selection of suppliers. Fleet capacity, sector coverage are considered for transport agency selection.