Quality Management Principles

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Quality management Principles

• The theory basis of quality management

• Support laboratory to establish and improve quality management system
Quality management Principles

Customer-focused

Mutually beneficial

Leadership

Fact-based

All in

Continuous improvement

Systematic method

Process

UNEP

Global Efficient Lighting Centre

UNEP Collaborating Centre for Energy Efficient Lighting

UN environment

National Lighting Test Centre

China
Customer-focused

- Customer: the organization or individual that accepts the product

- Customer of laboratory:
  - Government
  - Certification body
  - Manufacturer
  - Producer
  - Agent
  - Consumer
  - End user
  - Retailer
  - Purchaser
Customer-focused

- Customer demand is constantly changing

Safety certificate
Customer-focused

• What the laboratory should do?
  – Identify and understand the customer demand and expectation
  – Ensure the laboratory objective and goals meet customer’s demand and expectation
  – Ensure the internal communication on customer’s demand and expectation
  – Communicate with customer, and ensure the measure the customer’s satisfaction degree and take necessary actions
  – Protect customer’s confidential information and ownership
Customer-focused

- 1.4
- 4.1.2
- 4.1.5 c)
- 4.2.2 a)
- 4.2.2 note
- 4.4.1
- 4.4.1 c)
- 4.4.1 note
- 4.4.2
- 4.4.2 note
- 4.4.4
- 4.5.2
- 4.5.3
- 4.7
- 4.7.2
- 4.7 note
- 4.8
- 4.9.1
- 4.9.1 note
- 4.11.1 note
- 4.11.2 note
- 4.13.2.1 note
- 4.14.2
- 4.15.1
- 5.2.1 note
- 5.4.1
- 5.4.2
- 5.4.4
- 5.4.5.3
- 5.4.5.3 note
- 5.4.6.2 note
- 5.7.2
- 5.8.1
- 5.8.3
- 5.10.1
- 5.10.2 d)
- 5.10.3.1 c)
- 5.10.3.1 e)
- 5.10.4.4
- 5.10.5 note

4.2, 4.4, 4.7, 4.8, 5.10
Leadership

- The top of laboratory unify the purpose, direction and internal environment of the lab and should encourage the employees to fully involved in achieving the laboratory goals

4.1, 4.2, 4.4, 4.10, 4.15, 5.1
All in

- All of the people, whatever position they are at, are the basis of the organization, only their full participation can bring the greatest benefits to the organization.

5.2, 4.1.5.a), f), g), k), 4.2.1, 4.2.2.d)
Process

• Managing the relevant resources and activities as a process, you can get the expected results more efficiently.

• Through management of resources and activities, transfer the input into a set of activities, it can be regarded as a process. Such as contract review, testing, the report, all these can be regarded as a process. The output of a process is often directly into the next process or the input of several processes. Procurement can be the Inputs to such as, inspection method selection, subcontracting, personnel, equipment, facilities and environmental conditions, sampling, sample, result report, etc. The output of the equipment can also be used as a traceability input. System identification and management of the application of the organization, especially the interaction between these processes, known as the process method

4.14, 5.9
Systematic method

• Similar to the process approach. The process focuses on studying the process of a single process, i.e., the input, output, activity, required resources of the process, and the relationship between the process and other processes.

• The systematic method focuses on the development of a number of processes and even the composition of the process network, and how the system works effectively to achieve the objectives of the laboratory, through a systematic process to achieve the objectives of the laboratory. Such as the test results to achieve the process of planning the input is personnel, equipment, materials, method, environmental conditions, testing, etc., to determine the system of special activities of the measurement and evaluation, continuous improvement system.

4.1, 5.1
Continuous improvement is an eternal goal of the organization. The laboratory continually improves the effectiveness of the quality management system through quality policy, quality objectives, audit results, data analysis, corrective action and preventive actions, and management review. It can also use technical verification methods to achieve quality control, use of data analysis to find trends to prevent the occurrence of nonconformity, to achieve continuous improvement. Provide staff the trainings on continuous and methods. Improve the technical capacity of the laboratory, so as to dynamically adapt to internal and external environmental changes.

4.10, 4.11, 4.12, 4.14, 4.15, 5.9
Fact-based

- According to the analysis, laboratory ensures that data and information is sufficient, accurate and reliable, based on the analysis of the facts, experience judgments, make decisions and take measures. For example, the laboratory can conduct verification by PT or IC; using the same or different methods; re-testing of the retained samples; the evaluation of the relevance of different characteristics of different samples, the evaluation of the effectiveness of the technical verification; and the collection of data and information in the form of statistical techniques. These are the basis for improving the testing results quality.

4.13, 4.14, 4.15, 5.4.7, 5.9
Mutually benefit

• A laboratory cannot do everything, for example, the laboratory cannot produce all of the equipments by their own; and it is impossible for they to calibrate all of their testing equipment by themselves. It needs the cooperation with other laboratories and manufacturers, through the supply chain. So any lab has its own supplier or partner.

• Identify and select key suppliers, subcontractors.

4.5, 4.6
Thank you!
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