EHQMS Procedure

Data Analyis & Evaluation

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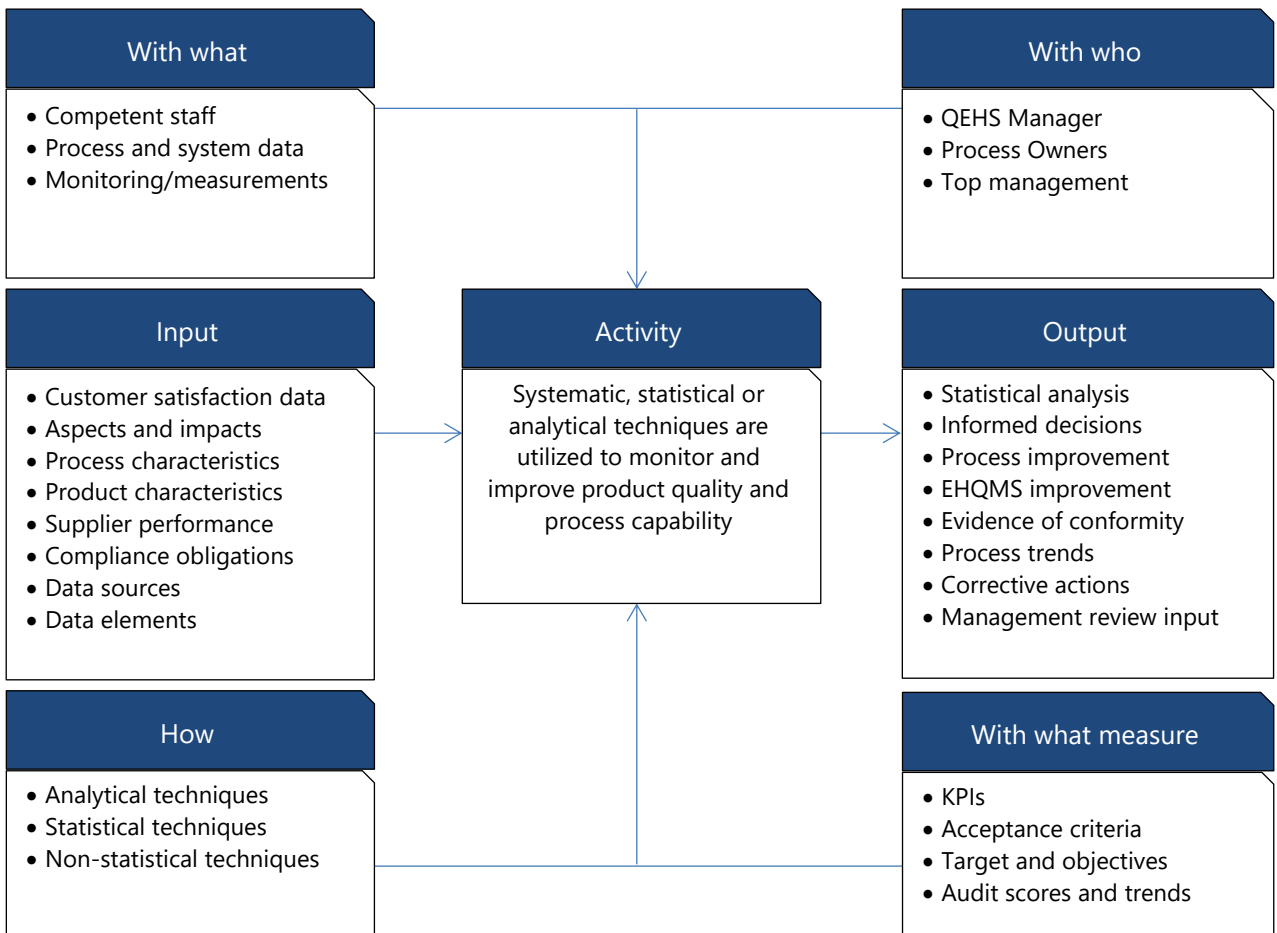
1 Data Analysis & Evaluation

1.1 Introduction & Purpose

The purpose of this procedure is to establish and define the roles and responsibilities for analyzing and reporting management system data in order to drive continual improvement and to facilitate a factual approach to decision making.

1.1.1 Process Turtle Diagram

With what	With who
• Competent staff • Process and system data • Monitoring/measurements	• QEHS Manager • Process Owners • Top management

Input	Activity	Output
• Customer satisfaction data • Aspects and impacts • Process characteristics • Product characteristics • Supplier performance • Compliance obligations • Data sources • Data elements	Systematic, statistical or analytical techniques are utilized to monitor and improve product quality and process capability	• Statistical analysis • Informed decisions • Process improvement • EHQMS improvement • Evidence of conformity • Process trends • Corrective actions • Management review input

How	With what measure
• Analytical techniques • Statistical techniques • Non-statistical techniques	• KPIs • Acceptance criteria • Target and objectives • Audit scores and trends

1.1.2 References

Standard	Title	ISO Clauses	Manual Sections
BS EN ISO 9001:2015	Quality management systems	9.1.3	9.1.3
BS EN ISO 14001:2015	Environmental management systems	9.1.2	9.1.4
BS EN ISO 45001:2018	OH&S management systems	9.1.2	9.1.4

1.1.3 Terms & Definitions

Term	Definition
Continual improvement	A recurring activity to increase the ability to fulfill requirements
Statistical Technique	Mathematical concepts, formulas, models used in the statistical analysis of data
Non-Statistical Technique	Sampling that relies on judgment to determine sample size, selection and evaluation

1.2   Application & Scope

Effective data analysis is an essential part of our EHQMS. Statistical and non-statistical techniques are utilized, where appropriate, and the data is analyzed by designated personnel and utilized for continuous product and process improvement.

1.3   Responsibilities

The QEHS Manager is required to:

1. Direct the use of statistical techniques;
2. Determine the need for the use of statistical, or non-statistical techniques;
3. Ensure that staff involved in the application of statistical techniques are provided with the necessary tools and knowledge;
4. Ensure that all staff involved in the application of statistical techniques are suitably trained.

1.4   Analysis & Evaluation of Data

1.4.1   General

Your organization monitors trends in the following activities by monitoring the key EHQMS data points and sources of information:

1. Customer satisfaction and dissatisfaction data;
2. Conformity to product requirements and legal requirements;
3. Accident or incident frequency rates;
4. Characteristics of processes, products and their trends;
5. Suppliers and their performance;
6. Integrated management system data.

Regardless of the nature of the data source, if there is a decision to escalate the information for further evaluation and investigation, the steps of investigation, identification of root causes and actions needed, verification, implementation, and effectiveness checks will be similar

1.4.2   Planning

As part of planning process, Top management reviews the processes critical to our operations with regard to quality, environmental and regulatory requirements and selects relevant data sources to measure, analyze and facilitate improvement as necessary.

In the process of planning measurement and analysis, our organization takes into account data sources, the measurement of data elements within each data source, the frequency of monitoring, and the analysis to be performed upon a data source. Refer to Section 1.6 for examples of process related data sources and data elements. The planning phase ensures the following:

1. Identification of relevant internal and external data sources that are indicators of process and product performance;
2. Provision for adequate resources and establish responsibilities and authorities to enable the necessary actions.
3. Resources may include technical experts, testing laboratories, data management, infrastructure, training, etc.;