

Quality Management Manual

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1 Introduction

This manual provides an overview of the quality system in operation at Northwinds of Wyoming, Inc and is an essential reference to the method in which the quality system functions.

As an overview manual this document contains references to the detailed procedures and documents used to operate the Quality System but do not contain copies of these itself. Quality System Procedures are referred to in this manual by the reference QSP 0XX, where this is the reference for the full procedure. Copies of the procedures are controlled issue documents and are available from the company on request.

This document is designed for general distribution to employees, suppliers and customers and is not a controlled document.

2 Scope

Northwinds of Wyoming, Inc specializes in construction services for the oil and gas industry. Our primary experiences and interests are in the construction and maintenance of natural gas processing plants, compressor stations, pump stations, sweetening plants and the installation of pipelines and pipeline appurtenances.

3 Company quality policy

(Reference: BS EN ISO 9001: 2000 Clauses 5.1 + 5.3 + 5.4.1)

Northwinds of Wyoming, Inc is committed to the production and delivery of quality products for our customers. It is only by delivering products that exceed the customer's expectations that we can retain customers and achieve our mission statement. We will only deliver the highest quality goods to our customers – we will deliver goods that don't come back to customers who do.

PRINCIPLES

The assurance of quality is fundamental to all the work carried out by Northwinds of Wyoming, Inc so as to provide products and services that give total customer satisfaction and exceed expectations. The long term commercial success and profitability of the company depends on the pricing, quality and delivery of products and services to exceed the needs and expectations of the customers. It is therefore, the established policy of Northwinds of Wyoming, Inc to provide customers with products that are fit for the purpose they were produced are delivered in conformance with the procedures and instructions detailed in the company's Quality Systems Manual. It is also Northwinds of Wyoming, Inc policy to establish and maintain an effective and efficient quality system planned and developed to meet the requirements of the company and which satisfies the requirements of BS EN ISO 9001: 2000 Quality System Management standard. To ensure that products meet the standards demanded by the customer, Northwinds of Wyoming, Inc maintains an effective Quality Management system based on BS EN ISO 9001: 2000.

The objectives of the quality system are:

- To reduce waste, reduce quality costs and continuously improve the quality of products and services.

- To provide evidence that material and customer services conform to the specified requirements.
 - To ensure that the customer's requirements are defined and satisfied at all times.
- The company ensures that all personnel are fully acquainted with this Quality Policy and objectives through on-going training and education at all levels.

PRACTICES

- Controlling all contractual documentation, agreements, claims, amendments, letters, etc. in such a manner that they are filed in date order, readily accessible, etc.
- Using a filing system that allows easy access and simple cross-referencing.
- Using a standard format for all documents and where there is more than one version of a document, the version number and the date of issue should be clearly marked.
- Making a record of all discussions, meetings and telephone conversations, noting agreed actions as appropriate.
- Keeping records of time expended and any other costs incurred whilst carrying out work. All external expenses should, where possible, be backed up with receipts.
- Retaining all documents (financial or otherwise) for two years following completion or early cessation of a project and allowing the customer access to said documents at all reasonable times.

4 The fundamentals of quality management

4.1 The principles

Principle 1 - Customer-focused organization: Organizations depend on their customers and therefore should understand current and future customer needs, meet customer requirements and strive to exceed customer expectations. Assure conformance to defined customer requirements. Understand current and future customers' needs and expectations. Measure customer satisfaction and act on it.

Principle 2 - Leadership: Leaders establish unity of purpose and direction of the organization. They should create and maintain the internal environment in which people can become fully involved in achieving the organization's objectives. Set policy and verifiable objectives, deploy policy, provide resources and establish an environment for Quality. Establish vision, direction and shared values. Set challenging targets and goals and implement strategies to achieve them. Coach, facilitate, and empower people.

Principle 3 - Involvement of People: People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit. Establish competency levels, train & qualify personnel. Provide clear authority and responsibility. Create personal ownership of an organizations targets and goals, by using its people's knowledge and experience and through training, achieve involvement in operational decisions and process improvement.

Principle 4 - Process Approach: A desired result is achieved more efficiently when related resources and activities are managed as a process. Establish, control and maintain documented processes. Explicitly identify internal and external customers and suppliers of processes. Focus on the use of resources in process activities, leading to effective use of people, equipment, methods and materials.

Principle 5 - System Approach to Management: Identifying, understanding and managing a system of interrelated processes for a given objective improves the organization's effectiveness and efficiency. Establish and maintain a suitable and effective documented Quality System. Identify a set of processes in a system. Understand their inter-dependencies. Align the processes with the organizations goals and targets. Measure results against key objectives.

Principle 6 - Continual Improvement: Continual improvement should be a permanent objective of the organization. Through management review, internal/external audits and corrective/preventive actions, continually improve the effectiveness of the Quality System. Set realistic and challenging improvement goals, provide resources and give people the tools, opportunities and encouragement to contribute to the continual improvement of the processes.

Principle 7 - Factual Approach to Decision Making: Effective decisions are based on the analysis of data and information. Management decisions and actions on the Quality System are based on the analysis of the factual data and information gained from reports on audits, corrective action, nonconforming product, customer complaints and other sources. Decisions and actions are based on the analyses of data and information to maximize productivity and to minimize waste and rework. Effort is placed on minimizing cost, improving performance and market share through the use of suitable management tools and technology.

Principle 8 - Mutually Beneficial Supplier Relationships: An organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value. Adequately define and document requirements to be met by sub- contractors. Review and evaluate their performance to control the supply of quality products and services. Establish strategic alliances or partnerships, ensuring early involvement and participation defining requirements for joint development and improvement of products, processes and systems. Develop mutual trust, respect and commitment to customer satisfaction and continual improvement.

4.2 'Plan - Do - Check - Act'

An essential of quality management is the 'Plan – Do - Check - Act' cycle. This cycle provides a consistent method for quality improvement:

Plan what is needed to be accomplished in the future and what is needed to do to get there.

Do what was planned.

Check the results of the action to see if the planned objectives were achieved.

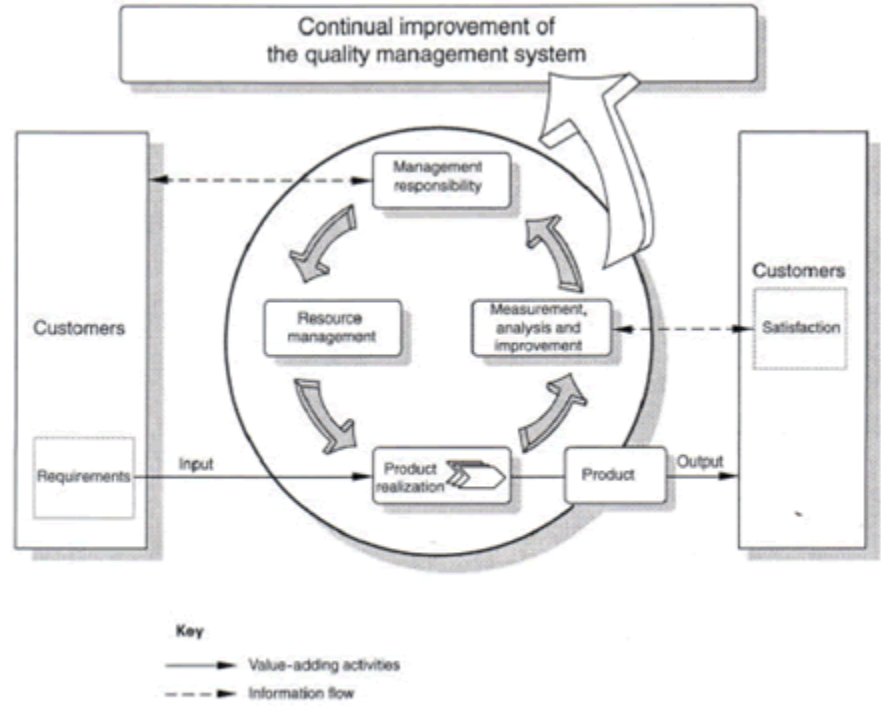
Act on the information to standardize or improve. Continue the cycle. The Plan - Do - Check - Act cycle is shown at right.



4.3 The ISO process-based quality management system

The quality management system used by Northwinds of Wyoming, Inc

Technology meets the BS EN ISO 9001: 2000 model for a process-based quality management system.



Model of a process-based quality management system

4.4 Terminology and Definitions for ISO 9001: 2000

Corrective Action: action taken to eliminate the cause of a detected nonconformity or other undesirable situation

Customer Dissatisfaction: customer's opinion of the degree to which a transaction has failed to meet the customer's needs and expectations. Customer complaints are a common indicator of customer dissatisfaction with a transaction, but their absence does not necessarily imply customer satisfaction.

Customer Satisfaction: customer's opinion of the degree to which a transaction has met the customer's needs and expectations

Design & Development: set of processes that transforms requirements into specified characteristics and into the specification of the product realization process

Document: information and its supporting medium

Effectiveness: measure of the extent to which planned activities are realized and planned results achieved

Efficiency: relationship between the result achieved and the resources used

Management System: system to establish policy and objectives and to achieve those objectives

Preventive Action: action taken to eliminate the cause of a potential nonconformity or other undesirable situation

Procedure: specified way to carry out an activity or process

Product: result of a process. There are four agreed generic product categories (the example below shows how they relate to a car)

- hardware, such as the tires
- software, such as the engine management system
- services, such as the warranty
- processed materials, such as the coolant or fuel

Process: a system of activities, which uses resources to transform inputs into outputs

Quality: ability of a set of inherent characteristics of a product, system or process to fulfill requirements of customers and other interested parties

Quality Improvement: part of quality management focused on increasing effectiveness and efficiency

Quality Manual: document specifying the quality management system of the organization

Quality Management System: system to establish a quality policy and quality objectives and to achieve those objectives

Quality Planning: part of quality management focused on setting quality objectives and specifying necessary operational processes and related resources to fulfill the quality objectives

Top Management: person or group of people who direct and control an organization at the highest level

Record: document stating results achieved or providing evidence of activities performed

5 Management Responsibility

(Reference: BS EN ISO 9001: 2000 Clause 5)

5.1 Organization and Management Structure

(Reference: BS EN ISO 9001: 2000 Clause 5.5.1)

The Quality Policy clearly states the company's quality objectives and commitment to quality. The Quality Policy relates to the whole of the company's activities. The Managing Director has overall responsibility for the quality system and is the designated management representative for quality management and the responsibilities include implementation, maintenance, audits and revisions.

5.2 Resources

(Reference: BS EN ISO 9001: 2000 Clause 6.1)

The company provides appropriate resources and training to allow these responsibilities to be carried out.

5.3 Management Representative

(Reference: BS EN ISO 9001: 2000 Clause 5.5.2)

The company has identified the resource requirements and provided adequate resources for the management of quality in the company.

The Managing Director has specific responsibility for:

- Ensuring that the quality system is established, completed and maintained in accordance with BS EN ISO 9001: 2000.
- Recording and improving the performance of the quality system.

5.4 Management Review

(Reference: BS EN ISO 9001: 2000 Clauses 5.6 + 8.5.1)

Management Reviews of the Quality System are carried out to ensure that the Quality Management System is suitable and effective. These reviews cover all aspects of quality management and are not limited to the requirements of BS EN ISO 9001: 2000.

Management Reviews are designed to ensure that Northwinds of Wyoming, Inc is not only doing things right but also doing the right things. Evidence of historic performance of the Quality System is used to establish that things are being done right and progress towards the company objectives is used to establish that the right things are being done.

5.5 Internal Communication

(Reference: BS EN ISO 9001: 2000 Clause 5.5.3)

The Quality Management System controls internal communications and recording relevant to product quality.

6 Quality system

(Reference: BS EN ISO 9001: 2000 Clauses 4.1 + 4.2)

The Quality System described in this manual is a fully documented system to meet the requirements of BS EN ISO 9001: 2000.

6.1 Quality Planning

(Reference: BS EN ISO 9001: 2000 Clause 5.4.2)

Quality planning is carried out to ensure that the requirements for quality are met and the quality plan covers all aspects of quality management that can affect the product or service.

Quality planning allows Northwinds of Wyoming, Inc to have an overview of the current and proposed procedures and to give the customer the product that they ordered.

7 Sales order processing - Contract review

(Reference: BS EN ISO 9001: 2000 Clauses 5.2 + 7.2)

Sales order processing covers every customer quotation and order to ensure that the quotation, order, tender or contract is complete and that the company can meet the customer's

requirements. All quotations and orders are processed to ensure that communications with customers are accurately recorded and to provide clear instructions for manufacture and supply. The order is reviewed at the quotation, order placement and order processing stages to ensure that the quotation has been accurately translated into an order.

8 Customer communication and satisfaction

(Reference: BS EN ISO 9001: 2000 Clause 7.2.3 + 8.2.1)

Customer satisfaction is the key to a successful business and satisfaction is monitored to ensure that the company is meeting the needs of the customer.

9 Document and data control

(Reference: BS EN ISO 9001: 2000 Clause 4.2.3 + 4.2.4)

Document and data control is essential to ensure that up-to-date documents and data are available, obsolete documents are removed as appropriate and that documents and data are reviewed and approved prior to being issued and after being amended. Document and data control ensures that our customers get the products that they want, that the products conform to the latest standards and specifications and that our internal records are complete and accurate.

10 Purchasing

(Reference: BS EN ISO 9001: 2000 Clause 7.4 + 7.4.1 + 7.4.2)

The control of purchasing is necessary to ensure that products are purchased only from approved suppliers and that they conform to the company's requirements as specified on the purchase order. Supplier selection is carried out for all materials and services used for in the completed product or service. The purpose of this is to ensure that suppliers of materials and services meet the specified requirements, their performance is regularly appraised and that staff engaged in the purchase of supplies maintain a consistent well-documented approach. The Managing Director is responsible for assessing and approving each relevant supplier. Purchase orders are reviewed before approval to purchase is given and copies of purchase orders are retained for checking and reconciliation with the relevant invoice.

11 Document and product identification

(Reference: BS EN ISO 9001: 2000 Clause 7.5.3)

Document and product identification is used to ensure that the correct documents and information are used in products and that the finished products are delivered to the right customer.

12 Process control

(Reference: BS EN ISO 9001: 2000 Clauses 6.3 + 6.4 + 7.1 + 7.5.1 + 7.5.2 + 8.2.3)

Process control relates to the production of products by Northwinds of Wyoming, Inc Ltd. Processes must be controlled to ensure that quality is not adversely affected. Quality cannot be inspected into the final product but must be built into the product by good control of the processes used in production.

13 Inspection and testing

(Reference: BS EN ISO 9001: 2000 Clauses 7.4.3 + 7.5.1 + 7.5.3 + 8.2.4)

Inspection and testing are carried out to ensure that specified product standards are met. The Quality Plan identifies the responsibility and processes used for inspection and test. In-process inspection takes place to ensure that the products are being made correctly. Final inspection takes place immediately prior to release to ensure that the complete product meets the customer's requirements.

14 Inspection equipment

(Reference: BS EN ISO 9001: 2000 Clause 7.6)

All relevant inspection and measuring equipment is controlled to ensure that measurement capability is maintained when checking products to the specified requirements.

15 Inspection and test status

(Reference: BS EN ISO 9001: 2000 Clause 7.5.3)

The inspection and test status of a product is identified to indicate the conformance, or otherwise, of the products to the specified requirements and to ensure that only conforming product is used, further processed or dispatched.

16 Control of non-conforming material

(Reference: BS EN ISO 9001: 2000 Clause 8.3)

Product that does not conform to the requirements is controlled to prevent it from being further processed. All non-conforming product is controlled by these methods.

17 Corrective action

(Reference: BS EN ISO 9001: 2000 Clauses 8.4 + 8.5.2 + 8.5.3)

Corrective actions are taken to eliminate the causes of non-conformities with the product, process or Quality Management system. Corrective action is taken as a result of each non-conformity or the analysis of a group of non-conformities to remedy an existing concern.

17.1 Customer Complaints

(Reference: BS EN ISO 9001: 2000 Clauses 8.4 + 8.5.2 + 8.5.3)

Dealing with customer complaints is of the utmost importance in preserving our relationship with the customer. The Quality System is designed to minimize customer complaints but if a complaint is raised by a customer then it must be dealt with promptly and efficiently. Complaints offer an opportunity to prove that we really care for our customers and we must grasp the opportunity to show this.

18 Preventive Action

(Reference: BS EN ISO 9001: 2000 Clauses 8.4 + 8.5.3)

Preventive actions are taken to eliminate the potential non-conformities with the product, process or Quality Management system. Preventive actions are also taken in order to prevent a concern from occurring. The Quality Management Representative assesses the risk of occurrence and takes appropriate action to prevent failures in the quality system or production.

19 Handling, storage, packaging and delivery

(Reference: BS EN ISO 9001: 2000 Clause 7.5.1 + 7.5.5)

Careful and appropriate handling, storage, packaging and delivery is necessary to ensure that products are suitably protected from damage and deterioration. This applies to all components that are to be incorporated into the product and to the completed product.

20 Quality records

(Reference: BS EN ISO 9001: 2000 Clause 4.2.4)

Quality records are essential to demonstrate conformance to customer requirements and the effective operation of the quality system. Quality records are those that relate to the requirements of BS EN ISO 9001: 2000.

21 Internal quality audits

(Reference: BS EN ISO 9001: 2000 Clauses 8.2.2 + 8.2.3)

Internal quality audits are carried out to verify that the quality system procedures are being carried out as described in this manual and the relevant Quality System Procedures. Audits are confined to the requirements of BS EN ISO 9001: 2000 and are carried out in accordance with the audit checklist for the relevant procedure. The Managing Director is responsible for scheduling, recording and following up on each audit using such assistance as is required.

22 Training

(Reference: BS EN ISO 9001: 2000 Clause 6.2.1 + 6.2.2)

All personnel employed by the company are given adequate instruction and training to enable them to perform their duties efficiently and safely. All personnel are to be fully aware of the quality requirements of the tasks they undertake.