Quality Manual

ISO 9001:2015

API Q1 9th Edition

2459 Lewis Ave.
Signal Hill, CA 90755

Introduction

Black Gold Pump & Supply, Inc. developed and implemented a Quality Management System (QMS) to document the company's best business practices, better satisfy the requirements and expectations of its customers and improve the overall management of **Black Gold Pump & Supply, Inc.**

The Quality Management System of **Black Gold Pump & Supply, Inc.** meets the requirements of the international standard ISO 9001:2015 and API Q1 9th Edition. The system addresses the design, development, production, and servicing of the company's products.

The quality manual is divided into (6) sections that associate to the Quality Management System sections of API Q1 9th Edition. Each section begins with a policy statement expressing **Black Gold Pump & Supply, Inc.'s** commitment to implement the basic requirements of the referenced Quality Management System section. Each policy statement is followed by specific information pertaining to the procedures that describe the methods used to implement the necessary requirements.

This quality manual describes the QMS, outlines authorities, inter-relationships and responsibilities of the personnel responsible for performing within the system. The quality manual also provides procedures and references for all activities comprising the QMS to ensure compliance to the necessary requirements of the standard.

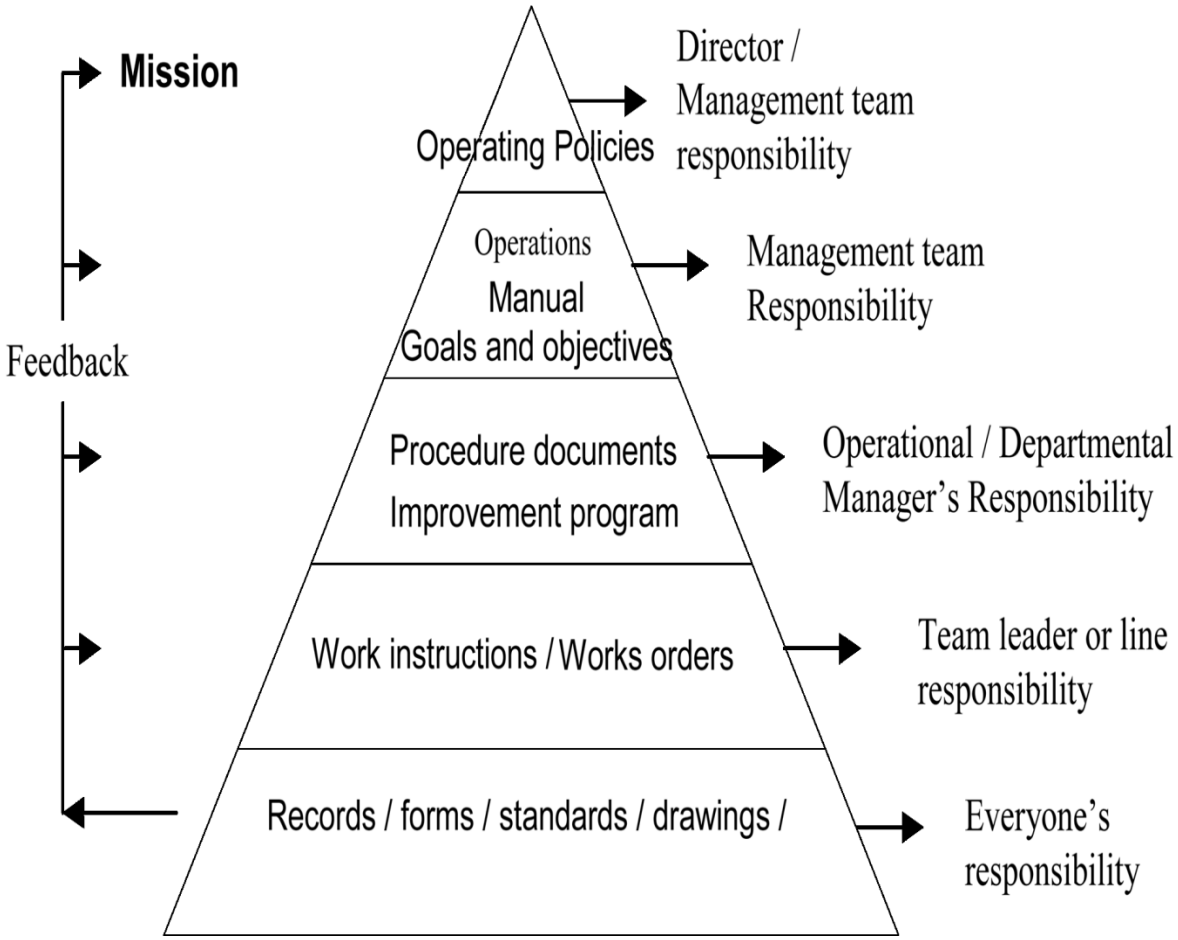
This quality manual is used internally to guide the company's personnel through the various requirements of the ISO 9001: 2015 and API Q1 9th Edition standards that must be met and maintained in order to ensure customer satisfaction, continuous improvement and provide the necessary instructions that create an empowered work force.

This quality manual is used externally to introduce our QMS to our customers and other external organizations. The quality manual is used to familiarize them with the controls that have been set in place to assure them that the integrity of the QMS is maintained and focused on customer satisfaction and continuous improvement.

President: _____

Mike Bair

Documentation Scheme


Mission
Feedback
Operating Policies
Director / Management team responsibility
Operations Manual
Goals and objectives
Management team Responsibility
Procedure documents
Improvement program
Operational / Departmental Manager's Responsibility
Work instructions / Works orders
Team leader or line responsibility
Records / forms / standards / drawings /
Everyone's responsibility

Quality Manual Distribution

The Quality Manual shall be distributed to the following:

President,
Vice President of Sales,
Director of Corporate Services,
Quality & Manufacturing Manager,
Safety Specialist,
Purchasing / Inventory Control,
Machine Shop Manager,
Pump Shop Manager
Engineering Department

Section 1: Scope

1.1 General

The quality manual outlines the policies, procedures and requirements of **Black Gold Pump & Supply, Inc.'s** Quality Management System. The system is structured to comply with the conditions set forth in the International Standard ISO 9001:2015 and API Q1 9th Edition.

Black Gold Pump & Supply, Inc. ISO 9001:2015 and API Q1 9th Edition certificates is for the Design, Product Development, Engineering, Manufacturing, Sales, Service, and Distribution of Oil Production tools for the Oil Production and Services Industry.

1.2 Application

Black Gold Pump & Supply, Inc. has determined that the following requirements are not applicable to the operations at this site and are documented as exclusions:

- ISO 9001:2015 – No Exclusions
- API Q1 9th Edition – No Exclusions

Section 2: Normative Reference

2.0 Quality Management System References

The following documents were used as reference during the preparation of the Quality Management System:

- **American National Standard ANSI/ISO/ASQ Q9001-2015**, Quality Management Systems – Requirements
- **American Petroleum Institute (API)** – **API Q1 -** Specification for Quality Management System Requirements for Manufacturing Organizations for the Petroleum and Natural Gas Industry
- **American Petroleum Institute (API)** – **API 11L6** – Design Calculations for Sucker Rod Pumping Systems
- **American Petroleum Institute (API) – API 11AX** – Specification for Subsurface Sucker Rod Pumps and Fittings
- **American Petroleum Institute (API) – API 11B** – Specification for Sucker Rods, Polished Rods, and Liners, Couplings, Sinker Bars, Polished Rod Clamps, Stuffing Boxes, and Pumping Tees.
- **American Petroleum Institute (API) – API RP-11AR** – Recommended Practices for Care and Use of Subsurface Pumps.
- **American Petroleum Institute (API) – API 5B** – Specification for Threading Gauging and Thread Inspection of Casing, Tubing, and Line Pipe Threads.
- **NACE MR0176** – Metallic Materials for Sucker Rod Pumps for Corrosive Oilfield Environments

Section 3: Terms, Definitions, and Abbreviations

3.1 Quality Management System Definitions

This section is for definitions unique to **Black Gold Pump & Supply, Inc.**

- **Customer owned property** - Any type of instrumentation, accessories, manuals, or shipping containers that belong to a customer.
- **Customer supplied product** - Any type of service or material supplied to be utilized in the manufacture, modification or repair of customer-owned property.
- **Conformity** - To conform means to meet or comply with requirements. There are many types of requirements. There are quality requirements, customer requirements, product requirements, management requirements, legal requirements, and so on.
- **Continual improvement** - a set of activities that an organization carries out in order to enhance its ability to meet requirements.
  Continual improvements can be achieved by carrying out audits, self-assessments, management reviews, and benchmarking projects.
  Continual improvements can also be realized by collecting data, analyzing information, setting objectives, and implementing corrective and preventive actions.
- **Non-conforming product** - When one or more characteristics of a product and/or service fail to meet specified requirements, it is referred to as a nonconforming product. When a product and/or service deviate from specified requirements, it fails to conform.

  Nonconforming products and/or service must be identified and controlled to prevent unintended use or delivery.
- **Product** – The end item result of meeting all contracts terms and conditions.
- **Quality Records** – Documentation of those activities wherein records of said activities must be maintained will be specified in the procedure or work instruction level documents;

Section 4: Quality Management System Requirements

4.1 Quality Management System

4.1.1 General

Black Gold Pump & Supply, Inc. has established, documented and implemented a Quality Management System (QMS) in accordance with the requirements of ISO 9001:2015 and API Q1 9th Edition. The system is maintained and continually improved through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive action and management review.

To design and implement the QMS **Black Gold Pump & Supply, Inc.** has:

a. Identified the processes needed for the QMS and their application throughout the organization and documented them on the 'Black Gold Core Business Functions & QMS Process Interaction' flow diagram at the end of this section of the Quality Manual.

b. Determined the sequence and interaction of these processes, and illustrated them on the Black Gold Core Business Functions & QMS Process Interaction.

c. Determined criteria and methods needed to ensure that the operation and control of the processes are effective, and documented.

d. Identified processes that require validation such as Welding, Electro-less Nickel Plating, Heat Treating, and Black Oxide. (see 5.7.1.5)

e. Ensured the continuing availability of resources and information necessary to achieve planned results and continual improvement of these processes

f. Established systems to monitor, measure and analyze these processes, and

g. Established processes to identify and implement actions necessary to achieve planned results and continual improvement of these processes

h. Black Gold Pump & Supply, Inc. manages these processes in accordance with the requirements of ISO 9001:2015 and API Q1 9th Edition.

i. Where **Black Gold Pump & Supply, Inc.** chooses to outsource any process that affects product conformity; **Black Gold Pump & Supply, Inc.** ensures control over such processes. Control of such processes is identified within the QMS.

j. Identified legal and other applicable requirements to which Black Gold Pump & Supply, Inc. claims compliance that are needed to achieve product and/or service conformity.

4.1.2 Quality Policy

Top management ensures that the Quality Policy is compatible and supports Black Gold's strategic vision. The Quality Policy is communicated to all Black Gold personnel. It is included in new hire employee training as well as QMS training. The Quality Policy is posted in prominent places throughout the facility to maintain high standards within our organization.

Management reviews the Quality Policy at each management review meeting to determine the policy's continuing suitability for our organization. The Quality Policy is documented on BG_412_D_ADM_Quality Policy_RX.X and is available to relevant parties, as appropriate.

4.1.3 Quality Objectives

Quality Objectives are established to support our organization's efforts in achieving our goal through our Quality Policy. **Black Gold Pump & Supply, Inc.** has determined the activities, resources needed, delegated responsibilities, timeframes, and evaluation methods for meeting the Quality Objectives. The Quality Objectives are reviewed bi-annually by Top Management for applicability during Management

Reviews. Quality Objectives are measurable, and reviewed against performance goals at each Management Review meeting.

a. Improve Customer Satisfaction as measured by Revenue and Customer Complaints.

b. Continuously improve process efficiency as measured by decreasing product defects & delivery times.

c. Maintain competent workforce as measured by Safety Metrics and Productivity Metrics.

d. Maintain fiscal responsibility by balancing revenue and spending.

4.1.4 Quality Management System Planning

The Quality Management System has been planned and implemented to meet our Quality Objectives and the requirements of ISO 9001: 2015 and API Q1 9th Edition standards. Quality planning takes place as changes that affect the quality system are planned and implemented.

Black Gold Pump & Supply, Inc. considers all external/internal issues, requirements of interested parties, and identifies potential risks as well as opportunities.

4.1.4.1 Organization and Context

Black Gold Pump & Supply, Inc. shall determine and define external and internal issues that are relevant to its purpose and strategic goal(s) and that affect its ability to meets the intended result(s) of the Quality Management System.

4.1.4.2 Understanding Interested Parties

Black Gold Pump & Supply, Inc. has determined interested parties that are relevant to the QMS such as customers, owners/shareholders, Black Gold personnel, and suppliers/channel partners.

4.1.5 Communication

4.1.5.1 Internal Communication

Processes and procedures are established for communication within the organization. Methods of communicating Black Gold Pump & Supply's Quality Policy and Quality Objectives as well as the effectiveness of the QMS include weekly Executive Management meetings, Office Administration meetings, Departmental Meetings, monthly safety meetings and Management Reviews.

4.1.5.2 External Communication

Black Gold Pump & Supply, Inc. has determined and implemented various methods for communicating with external organizations, including customers, to ensure requirements are understood throughout contract execution, where applicable and product realization.
Black Gold Pump & Supply, Inc. has implemented an effective procedure (BG_720_P_SAM_ Customer Related Processes_RX.X) for communicating with customers. External communication is conducted via email, phone calls, personnel visits to customer sites and/or vendor sites.
External communication addresses the following:
a. execution of inquiries, contracts, or order handling and amendments (see 5.1);
b. provision of product information, including product nonconformities identified after delivery to the customer (see 5.10.4);
c. feedback and customer complaints (see 6.2.1); and
d. when required by contract, providing information required by product quality plans and subsequent changes to those plans (see 5.7.2).

4.2 Management Responsibility

4.2.1 General

Top management has been actively involved in implementing the Quality Management System (QMS). It has provided the vision and strategic direction for the growth of the QMS, and established quality objectives and the quality policy.

To continue to provide leadership and show commitment to the improvement of the QMS, management will do the following.

a. Communicate the importance of meeting customer, statutory, and regulatory requirements;

b. Establish and Measure Quality Objectives;

c. Establish and communicate Black Gold's Quality Policy;

d. Conduct bi-annual Management Reviews;

e. Ensure the availability of resources.

4.2.2 Responsibility and Authority

An organizational chart has been established to show the interrelation of personnel in the organization. Job descriptions define the responsibilities and authorities of each of the positions on the organizational chart. Job descriptions and the organizational chart are reviewed and approved by top management for adequacy. These documents are available throughout the organization to help personnel understand responsibilities and authorities.

4.2.3 Management Representative

The Director of Quality and Manufacturing has been appointed by top management as the Management Representative. As Management Representative, that person has the following responsibility and authority:

a. Ensure that processes needed for the Quality Management System are established, approved and implemented.

b. Report to top management on the performance of the Quality Management System, and note needed improvements.

c. Ensure initiation of corrective/preventative actions to minimize the likelihood of the occurrence of nonconformities.

d. Promote awareness of customer requirements throughout the organization.

e. Acts as a liaison with external parties such as customers and/or auditors on matters relating to the QMS.

4.3 Organization Capability

4.3.1 Provisions of Resources

Black Gold Pump & Supply, Inc. has implemented a Quality Management System that complies with the ISO 9001:2015 standard and API Q1 9th Edition. This implementation was achieved with management commitment and with sufficient resources for the implementation. To effectively maintain and continually improve the Quality Management System, top management considers capabilities and constraints of existing internal resources and provides necessary resources as needed.

4.3.2 Human Resources

4.3.2.1 General

To ensure competence of Black Gold's personnel, job descriptions have been prepared identifying the qualifications required for each position that affects product quality. Qualifications include requirements for education, skills and experience. Appropriate qualifications, along with required training, provide the competence required for each position.

4.3.2.2 Personnel Competence

Black Gold's personnel shall be competent within their function(s) based on the appropriate education, training, skills, and experience needed to meet product and customer requirements. Evidence of competence of each Black Gold personnel shall be recorded and maintained in personnel files. (see 4.5).

4.3.2.3 Awareness and Training

Qualifications are reviewed upon hire, when an employee changes positions or the requirements for a position change. Human resources maintain records of employee qualifications. If any differences between the employee's qualifications and the requirements for the job are found, training or other action is taken to provide the employee with the necessary competence for the job. The results of that training are then evaluated through Management By Planning (MBP) Process to determine if the training was effective. All records and evaluations are stored in employee file for reference and review. Training and evaluation are conducted according to the Training procedure. (BG_622_P_ADM_Competence, Awareness & Training_RX.X)

All Black Gold personnel are trained on the relevance and importance of their activities and how they contribute to the achievement of the quality objectives.

4.3.2.4 Organizational Knowledge

Black Gold Pump & Supply, Inc. shall determine the knowledge necessary for the operation or its processes and to achieve conformity of products and services.

Black Gold's organizational knowledge is documented in departmental procedures stored and maintained in Black Gold's SharePoint. Black Gold departments also have hard-copy binders with controlled documents to utilize as reference when needed.

4.3.3 Work Environment

A work environment suitable for achieving product conformance is maintained. The work environment is managed for continuing suitability. Data from the quality system is evaluated to determine if the work environment is sufficient for achieving product conformance, or if preventive or corrective action related to the work environment is required.

To meet quality objectives and product and/or service requirements **Black Gold Pump And Supply, Inc.** has determined the infrastructure as described in (BG_630_P_ADM_Infrastructure_RX.X). As new infrastructure requirements arise, they will be documented in quality plans. Existing infrastructure is maintained to ensure product and/or service conformity.

The work environment includes the following:

a. Buildings, workspace, and associated utilities.

b. Process equipment and its maintenance;

c. Supporting services such as transportation, communication, and information systems.

d. Conditions under which work is performed such as physical and other environmental factors.

4.4 Documentation Requirements

4.4.1 General

The Quality Management System documentation includes:

a. A documented Quality Policy and Quality Objectives

b. A Quality Manual (BG_441_D_ADM_Quality Manual_RX.X) that addresses the following:

1. The scope of the QMS, including justification for any exclusion to specific QMS elements. (See Section 1)

2. A description of the sequence and interaction between the processes of the QMS.

3. Identification of processes that require validation: Welding, Electro-less Nickel Plating, Heat Treating, and Black Oxide. (See 5.7.1.5)

4. Reference to documented procedures that control the QMS processes.

c. Documented Procedures, work instructions and forms required by the quality management system shall be controlled.

d. Documents and Quality Records identified as needed for the effective planning, operation and control of our processes, and

e. Identification of legal and other applicable requirements to which **Black Gold Pump & Supply, Inc.** claims compliance that are needed to achieve product conformity.

4.4.2 Procedures

All procedures referenced in this Quality Manual has been prepared to describe **Black Gold Pump & Supply, Inc.**'**s** QMS. The scope and permissible exclusions of the QMS are described in Section 1 of this manual. Each section of the manual references documented QMS procedures relating to the requirements outlined in that section. The Process Flow Diagram at the end of Section 4 provides a description of the interaction between the processes of the QMS system.

4.4.3 Control of Documents

All of the QMS documents (Procedures & Records) are controlled according to the Document Control Procedure (BG_423_P_ADM_Document Control_RX.X). This procedure defines the process for:

a. Approving documents for adequacy prior to issue;

b. Reviewing and updating as necessary and re-approving documents;

c. Ensuring that changes and current revision status of documents are identified;

d. Ensuring that relevant versions of applicable documents are available at points of use;

e. Ensuring that documents remain legible and readily identifiable;

f. Ensuring that documents of external origin are identified and their distribution controlled, and;

g. Preventing the unintended use of obsolete documents and to apply suitable identification to them if they are retained for any purpose;

h. Procedures, work instructions, and forms required by the QMS will be controlled.

i. A master list or equivalent shall be established to identify the current revision status of documents.

4.4.4 Use of External Documents in Product Realization

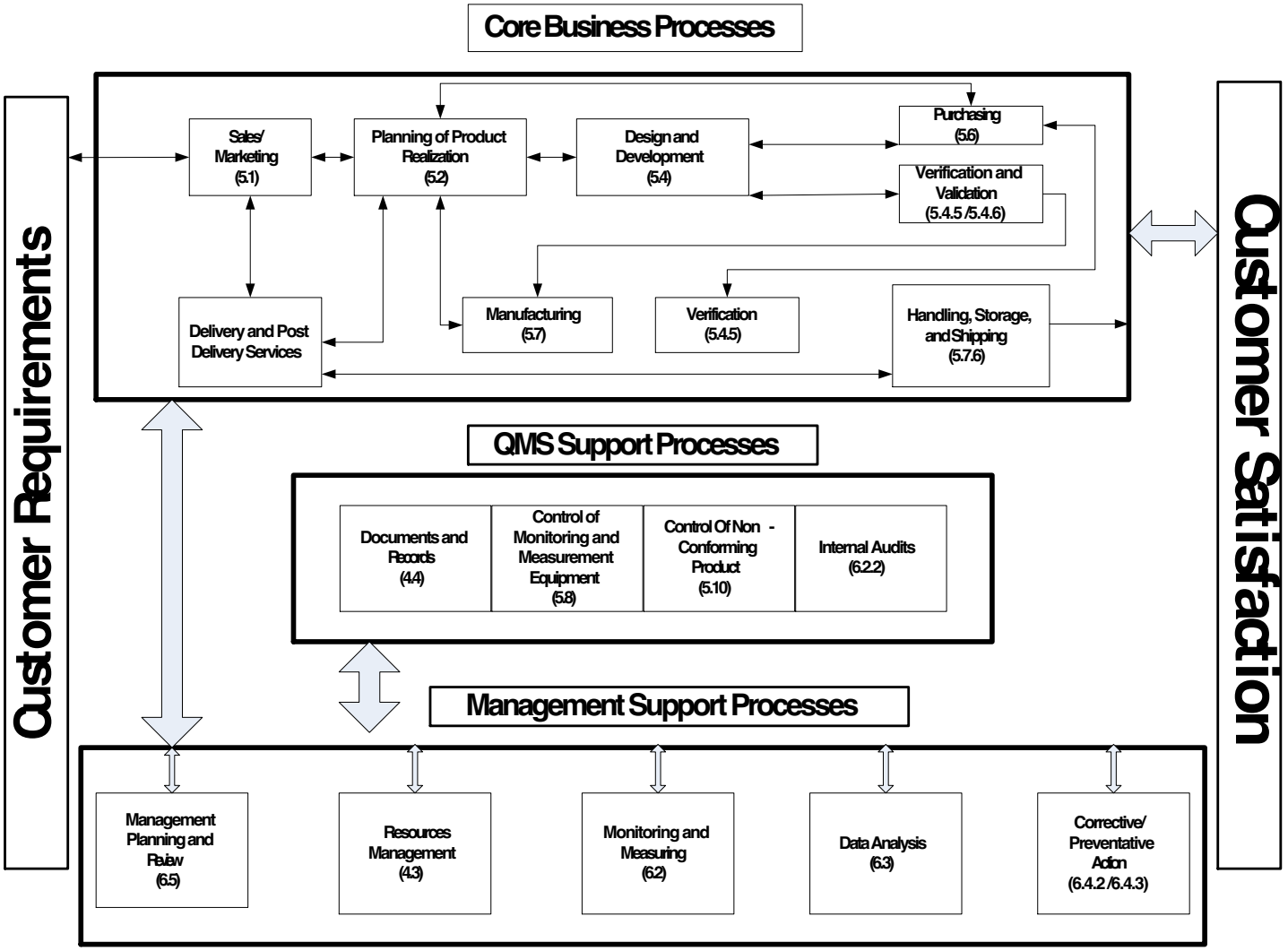
When API product or other external specification requirements, including addenda, errata, and updates, are used in the design or manufacture of the product, Black Gold Pump & Supply, Inc. shall maintain a documented procedure for the integration of these requirements into the product realization process and any other affected processes.

4.5 Control of Records

Quality records are maintained to provide evidence of conformity to requirements and of the effective operation of the QMS. Records are maintained according to the Control of Quality Records Procedure (BG_424_P_ADM_Control of Quality Records_RX.X). This procedure requires that quality records remain legible, readily identifiable and retrievable. The procedure defines the controls needed for identification, storage, protection, retrieval, retention time and disposition of quality records.

Records, including those originating from outsourced activities, shall be established and controlled to provide evidence of conformity to requirements and the organization's quality management system.

Black Gold Core Business Functions & QMS Process Interaction


Core Business Processes
Customer Requirements
Customer Satisfaction
Sales/ Marketing (5.1)
Planning of Product Realization (5.2)
Design and Development (5.4)
Purchasing (5.6)
Verification and Validation (5.4.5 /5.4.6)
Delivery and Post Delivery Services
Manufacturing (5.7)
Verification (5.4.5)
Handling, Storage, and Shipping (5.7.6)
QMS Support Processes
Documents and Records (4.4)
Control of Monitoring and Measurement Equipment (5.8)
Control Of Non - Conforming Product (5.10)
Internal Audits (6.2.2)
Management Support Processes
Management Planning and Review (6.5)
Resources Management (4.3)
Monitoring and Measuring (6.2)
Data Analysis (6.3)
Corrective/ Preventative Action (6.4.2 /6.4.3)

Section 5: Product Realization

5.1 Contract Review

5.1.1 General

Black Gold Pump & Supply, Inc. has established and maintained a documented procedure (BG_724_P_ADM_Contract Review_RX.X) for the review of customer and/or supplier requirements related to the provision of products and required servicing.

Black Gold Pump & Supply, Inc. has a process in place for the review of requirements related to the product (BG_720_P_SAM_ Customer Related Processes_RX.X). The review is conducted before the order is accepted.

5.1.2 Determination of Requirements:

Black Gold Pump & Supply, Inc. shall determine the following:

a. Customer requirements

b. Legal and other applicable requirements

c. Requirements not stated by the customer but are considered necessary by Black Gold for the provision of product(s).

Where the customer provides no documented statement of requirements, the customer requirements shall be confirmed by Black Gold Pump & Supply, Inc. and records maintained. (see 4.5)

5.1.3 Review of Requirements:

Black Gold Pump & Supply, Inc. shall review customer requirements related to the provision of product(s). This review shall be done prior to **Black Gold Pump & Supply, Inc.'s** commitment to delivery of product to the customer and shall ensure:

a. Requirements are identified and documented;

b. Requirements differing from those previously identified are resolved;

c. **Black Gold Pump & Supply, Inc.** has the capability to meet the documented customer requirements.

Where customer requirements are changed, **Black Gold Pump & Supply, Inc.** shall ensure that relevant documents are amended and that all relevant personnel are made aware of changed requirements.

Records of the results of the review, including resulting actions, and any new requirements shall be maintained. (see 4.5)

5.2 Planning

Quality planning is required before new products or processes are implemented. The quality planning may take place as a design project according to the Planning of Product Realization procedure (BG_710_P_ENG_ Planning of Product Realization_RX.X). During this planning, management or assigned personnel will identify the following:

a. The quality objectives and customer requirements for the product(s) and/or service;

b. Processes, documentation and resources required

c. Verification, validation, monitoring, inspection and test requirements

d. Determination of legal requirements

e. Criteria for product and/or service acceptance;

f. Contingencies based on risk assessment (see 5.3)

g. Management of Change (MOC) (see 5.11)

h. The output of planning shall be documented and updated as changes occur.

i. Address records

The output of quality planning includes documented quality plans, processes, procedures and design inputs/outputs. The plans shall be maintained in a structure suitable for the organization's method of operation.

When product and/or service requirements are provided from outside sources, **Black Gold Pump & Supply, Inc.** will define the methods and establish control features used to translate these requirements into the product and service realization process.

5.3 Risk Assessment and Management

Black Gold Pump & Supply, Inc. maintains a Risk Assessment procedure (BG_544_P_ADM_Risk Assessment and Management_RX.X) to control risks associated with impact on delivery and quality of product and/or service. The Risk Assessment procedure provides a technique for conducting risk assessment regarding product and/or service delivery and product and/or service quality.

Risk Assessment associated with product and/or service quality and delivery shall include:

a. Facility / equipment availability and maintenance; and

b. Supplier performance and material availability/supply;

c. Delivery of nonconforming product;

d. Availability of competent personnel;

e. Records of Risk Assessment and management including actions taken shall be maintained.

(See BG_544_F_ADM_Risk Management Matrix_RX.X)

f. Identify risks (potential or real) associated with services and service-related products;

g. Identify and use risk management tools and techniques;

h. Select, communicate and implement the mitigation or preventive control measures to reduce or avoid exposure to loss; and

i. Notify the customer of remaining risks that may impact the service.

5.4 Design and Development

5.4.1 Design and Development Planning

The design and development procedure (BG_730_P_ENG_ Design and Development_RX.X) outlines the process for controlling the design and development process. Sales, Engineering and Manufacturing plan design and development per this procedure. The design plan includes:

a. Design and development stages.

b. Required design reviews (conceptual, interim, and final)

c. Verification and validation methods appropriate to each design and development stage.

d. Resources, responsibilities and authorities for design and development.

e. Identification of the technical interfaces required for the project.

f. Updating of the design plan as the project progresses.

g. When design and development activities are performed at different locations within the same organization, the procedure shall identify the controls required to ensure that the designs meet the requirements.

h. When design and development are outsourced, the organization shall ensure the supplier meets the requirements of **Black Gold Pump & Supply, Inc.**

5.4.2 Design and Development Inputs

Inputs relating to product requirements are determined and documented according to the Design and Development procedure (BG_730_P_ENG_ Design and Development_RX.X). All inputs are reviewed for adequacy and completeness, and to resolve any ambiguous inputs. Inputs include:

a. Functional and performance requirements of products and/or service-related products

b. Customer-specified requirements

c. Applicable environmental, statutory, regulatory and legal requirements.

d. Where applicable, information derived from previous similar designs.

e. Requirements provided from external sources, including API product specifications.

f. methodology, assumptions, and formulae documentation

g. Other requirements essential for design and development as well as results from risk assessments (see 5.3)

All design and development input results are recorded on a Requirements Traceability Matrix pertaining to specific product or project.

5.4.3 Design and Development Outputs

Outputs of design and development are documented according to the Design and Development Procedure (BG_730_P_ENG_ Design and Development_RX.X). They are documented in a format that enables verification against the inputs, and are approved prior to release. Outputs:

a. Meet the input requirements.

b. Provide appropriate information for purchasing, production and for service provision.

c. Contain or reference product and/or service acceptance criteria.

d. Reference to product(s) and/or components that are critical to the design;

e. Include results of applicable calculations;

f. Specify the characteristics of the product that are essential for its safe and proper use.

g. Provide controls for the execution of the service, including allowable variations in the service execution parameters;

All design and development output results are recorded on a Requirements Traceability Matrix pertaining to specific product or project.

5.4.4 Design and Development Review

The design plan specifies suitable stages of the project to conduct design and development review. Reviews take place per the design and development procedure; results of design review are recorded in minutes as well as on Requirements Traceability Matrix of the design review meetings which are maintained as a quality records. Design reviews:

a. Evaluate the results of design and development activities and determine if they fulfill requirements.

b. Identify any problems and propose necessary actions.

c. Include representatives of functions concerned with the design and development stage being reviewed.

5.4.5 Design and Development Verification and Final Review

Design verification is planned and performed to ensure that the design and development outputs have satisfied the design and development input requirements. Records of the results of the verification and any necessary actions are maintained in the Requirements Traceability Matrix per the Design and Development procedure (BG_730_P_ENG_ Design and Development_RX.X).

5.4.6 Design and Development Validation and Approval

Design and development validation is performed per the design plan to ensure that the resulting product is capable of fulfilling the requirements for the specified or known intended use or application. Validation and approval is completed prior to delivery. Black Gold Executive Management must approve product and or project before releasing to customer and/or end user. Records of the validation and approval activities are maintained per the Design and Development procedure.

5.4.7 Control of Design and Development Changes

The design and development procedure defines a process for identifying, recording, verifying, validating and approving design changes. (see BG_732_P_ENG_Engineering Change Process and Control_RX.X). The review of design and development changes includes an evaluation of the effect of the changes on constituent parts and delivered product. Records are maintained to show the results of the review and any necessary actions identified during the review.

5.5 Contingency Planning

5.5.1 General

Black Gold Top Management shall maintain a documented procedure (BG_543_P_ADM_Contingency Planning_RX.X) for contingency planning needed to address risk associated with impact on delivery and quality of product and/or service. The contingency plan shall be based on assessed risk and the output will be documented and communicated to relevant Black Gold personnel and updated as required.

5.5.2 Planning Output

The contingency plan shall include the following:

a. Actions required in response to significant risk scenarios to mitigate effects of disruptive incidents;

b. Identification and assignment of responsibilities and authorities; and

c. Internal and external communication controls

5.6 Purchasing

5.6.1 Purchasing Control

5.6.1.1 Procedure

A documented procedure (BG_740_P_ADM_Purchasing_RX.X) is followed to ensure that purchased product conforms to the specified purchase requirements. The procedure outlines

a. The determination of the criticality of the service(s) or products as they are applicable to conformance to product or customer requirements.

b. Suppliers are evaluated and selected based on their ability to supply product in accordance with requirements as outlined in the procedure.

c. Type and extent of control applied to the supplier based on the criticality of the product or service.

d. Criteria for selection, evaluation and re-evaluation are documented in the procedure. Records of the evaluation and any necessary actions are maintained as quality records.

e. Maintain a list of approved suppliers and scope of approval.

5.6.2 Purchasing information

Purchasing information describes the product to be purchased, including where appropriate:

a. Requirements for approval of product and/or service, procedures, processes and equipment;

b. Requirements for qualification of personnel;

c. Quality management system requirements;

d. Applicable version of specifications, drawings, process requirements, inspection instructions, traceability, and other relevant technical data;

e. Requirements for acceptance criteria of service and service-related product;

The purchasing documents are reviewed to ensure the adequacy of requirements before orders are placed with the supplier.

5.6.3 Verification of purchased product

The Purchasing procedure (BG_421_P_MFG_Shipping and Recieving_RX.X) describes the process used to verify that purchased product meets specified purchase requirements. If **Black Gold Pump & Supply, Inc.** or the customer will perform verification at the supplier's premises, the verification arrangements and method of product release are documented in the purchasing information.

5.6.1.2 Initial Supplier Evaluation – Critical Purchases

For purchase of critical products, components or activities, the criteria for the initial evaluation of suppliers by the organization shall be site-specific for each supplier and shall include the following:

a) Verify that the supplier's quality management system conforms to the quality system requirements specified for suppliers by the organization; and

b) Assessment of the supplier to ensure its capability to meet the organization's purchasing requirements by:

1) Performing an on-site evaluation of relevant activities, or

2) Performing first article inspection to ensure conformance to stated requirements, or

3) Identifying how the supplied product conforms to stated requirements when limited by proprietary, legal, and/or contractual arrangements.

5.6.1.3 Initial Supplier Evaluation – Noncritical Purchases

For purchase of noncritical products, components, or activities that impact product realization or the final product, the criteria for evaluation of suppliers by the organization shall meet the requirements of 5.6.1.2 or satisfy one or more of the following:

a) Verify that the supplier's quality management system conforms to the quality system

requirements specified for suppliers by the organization; or

b) Evaluation of the supplier to meet the organization's purchasing requirements; or

c) Evaluation of the product upon delivery or activity upon completion.

5.6.1.4 Supplier Reevaluation

For reevaluation of all suppliers (critical and noncritical), the requirements of 5.6.1.2 and 5.6.1.3 shall apply.

5.6.1.5 Supplier Evaluation - Records

a. Suppliers are recorded onto Vendor Performance log if any non-conformances are identified with vendor product or service.

b. Records are reviewed on a Quarterly basis as well as discussed at Management Review Meetings.

c. Suppliers with excessive non-conformances will be given a Corrective Action /Preventative Action Report (CPAR) for major non-conformances and will be expected to find root cause and submit a corrective action plan. The corrective action plan will be audited by Black Gold.

5.6.1.6 Outsourcing

Where **Black Gold Pump & Supply, Inc.** chooses to outsource any activity within the scope of its quality management system, **Black Gold Pump & Supply, Inc.** shall ensure that all applicable elements of its quality management system are satisfied and shall maintain responsibility for product conformance to specified requirements, including applicable API product specifications, associated with product realization.

5.7 Production and Service Provision

5.7.1 Control of production and service provision

Black Gold Pump & Supply, Inc. plans and carries out production and service provision under controlled conditions according to documented procedure (BG_750_P_Control of Production And Service Provision_RX.X). Controlled conditions include, as applicable:

a. The availability of information that describes the characteristics of the product and/or service

b. The availability of work instructions of product and/or service;

c. Process control documents of product and/or service to include API product specifications or equivalent, Reference instructions and acceptance criteria, and Customer inspection holds or witness points if required.

d. Personnel training and competence;

e. The availability and use of monitoring and measuring devices and other suitable equipment;

f. The implementation of monitoring and measurement activities

g. The implementation of product release, delivery and post-delivery activities

h. Implementation of the product quality plan, when applicable;

i. Ensuring design requirements and related changes are satisfied, when applicable;

j. Defined contract requirements;

k. Risks assessment and management;

5.7.2 Validation of Processes for Production and Service Provision

Black Gold Pump & Supply, Inc. validates any processes for production and service provision where the resulting output cannot be verified by subsequent monitoring or measurement. This includes any processes where deficiencies become apparent only after the product is in use or been delivered. Validation demonstrates the ability of these processes to achieve planned results.

Black Gold Pump & Supply, Inc. has documented the validation process by obtaining the following:

a. Defined criteria for review and approval of the processes.

b. Approval of equipment and qualification of personnel.

c. Use of specific methods and procedures.

d. Requirements for records.

e. Process control documents / Work Instructions

f. Revalidation

5.7.1.3 Process Control Documents

Black Gold Pump & Supply, Inc. shall document process controls in routings, work orders, travelers, and checklist required by **Black Gold Pump & Supply, Inc.** and shall include requirements for verifying applicable product quality plans (see 5.7.2), API product specifications (when applicable), customer requirements, and/or other product standards. The process control shall include or reference instructions and acceptance criteria for processes, tests, inspections, and/or required customer's inspection hold or witness points.

5.7.1.4 Product and Service Realization Capability Documentation

Black Gold Pump & Supply, Inc. shall develop and maintain documentation that includes but is not limited to product realization plans (see 7.1) and records of review/verification, validation, monitoring, measurement, inspection, and test activities, including criteria for product acceptance that demonstrates the capability of **Black Gold Pump & Supply, Inc.** to satisfy specified product and/or service requirements. (See BG_710_F_ENG_Requirements Traceability Matrix_RX.X)

5.7.2 Product and Service Quality Plans

Black Gold Pump & Supply, Inc. shall develop a quality plan that specifies the processes of the QMS (including the product and service realization processes) and the resources to be applied to the product.

The product and service quality plan shall include the following:

a. Description of the product and/or service (critical and noncritical);

b. Required activities and documentation for compliance with customer and legal requirements;

c. Identification of responsible functions for each activity, including external parties

d. Required processes and documentation, including required inspections, tests, and records, for conformance;

e. Identification and reference to control of outsourced activities;

f. Identification of procedures, specifications, and other referenced documentation used in each activity;

g. Identification of the required hold, witness, monitor, and document review points.

h. Service equipment and monitoring devices (see 5.8);

i. Identification and controls of risk (see 5.3);

j. Identification of the required records.

The quality product and service plans and any revisions to them shall be documented and approved by **Black Gold Pump & Supply, Inc.** top management to ensure customer requirements and met.

When required by contract, the service quality plan and any revisions shall be communicated to the customer.

5.7.3 Identification and Traceability

Black Gold Pump & Supply, Inc. identifies the product and/or service throughout product and service realization according to the Identification and Traceability procedure (BG_753_P_MFG_ Identification and Traceability_RX.X). Product and /or service are identified with respect to monitoring and measurement requirements.

Black Gold Pump & Supply, Inc. controls and records the unique identification of the product where ever traceability is a specified requirement.

5.7.4 Product and Inspection, Test, and Validation Performance Status

Black Gold Pump & Supply, Inc. shall maintain a documented process for the identification of product inspection, test, and validation performance status throughout the product and service realization process (See BG_710_F_ENG_Requirements Traceability Matrix_RX.X) that indicates the conformity or nonconformity of product with respect to customer requirements, inspection requirements and/or tests performed. **Black Gold Pump & Supply, Inc.** shall ensure that only product that meets requirements or that is authorized by customer approval (see BG_830_P_MFG_ Control of Nonconforming Product_RX.X (sec. 5.10.1d)) is released.

Black Gold work orders will serve as record for product and/or service performed on service-related product.

5.7.5 Customer Property

Black Gold Pump & Supply, Inc. exercises care with customer property while it is under the organization's control or being used. A procedure (BG_754_P_MFG_Customer Property_RX.X) outlines the Identification, documentation, validation, verification, protection and safeguarding of customer property provided for use and/or service. If any customer property is lost, damaged or otherwise found to be unsuitable for use, this is reported to the customer and records maintained.

Validation of service-related product or customer property shall be completed prior to the execution of the service or use. Records of the result of validation, when performed, shall be maintained. (see 4.5)

5.7.6 Preservation of Product

Black Gold Pump & Supply, Inc. preserves the conformity of product during internal processing and delivery to the intended destination per procedure (BG_755_P_MFG_Preservation of Product_RX.X). This preservation includes identification, handling, packaging, storage and protection. Preservation also applies to the constituent parts of a product.

5.7.6.1 General

Black Gold Pump & Supply, Inc. shall maintain a documented procedure describing the methods used to preserve the product and constituent parts throughout product realization and delivery to the customer in order to maintain conformity to requirements.

As applicable, preservation shall include identification and traceability marks, transportation, handling, packaging, and protection.

5.7.6.2 Storage and Assessment

The procedure shall identify the requirements for storage and assessment. **Black Gold Pump & Supply, Inc.** shall use designated storage areas or stock rooms to prevent damage or deterioration of product, pending use or delivery.
In order to detect deterioration, the condition of product or parts in stock shall be assessed at specified intervals identified by the procedure. The interval shall be every month which is appropriate to the products or parts being assessed.

5.7.7 Inspection and Testing

5.7.7.1 General

Black Gold Pump & Supply, Inc. shall maintain a documented procedure for inspection and testing to verify that product requirements have been met. The procedure shall include requirements for in-process and final inspection and testing. Records of required inspection and testing shall be maintained per documented procedures (see 4.5).

5.7.7.2 In-process Inspection and Testing

Black Gold Pump & Supply, Inc. shall inspect and test the product at planned stages as required by the product quality plan (see 5.7.2), process control documents (see 5.7.1.3), and/or documented procedures. Evidence of conformity with the acceptance criteria shall be maintained.

5.7.7.3 Final Inspection and Testing

Black Gold Pump & Supply, Inc. shall perform all final inspection and testing in accordance with the product quality plan (see 5.7.2) and/or documented procedures to validate and document conformity of the finished product to the specified requirements.
Personnel other than those who performed or directly supervised the production of the product shall perform final acceptance inspection at planned stages of the product realization process.

5.7.8 Preventative Maintenance

Preventative Maintenance (PM) records are kept by each department maintaining associated equipment. Major equipment such as forklifts, trucks, and CNC machines are maintained by outsourced resources. Outsourced records are maintained with purchasing records.

Frequency of maintenance???

5.8 Control of Testing, Measuring and Monitoring Equipment

Black Gold Pump & Supply, Inc. has determined the monitoring and measurement to be undertaken and the monitoring and measuring equipment needed to provide evidence of conformity of product to determined requirements. A documented procedure (BG_760_P_MFG_ Control of Monitoring and

Measuring Equipment_RX.X) outlines the process used to ensure that monitoring and measurement to be carried out are carried out in a manner that is consistent with the monitoring and measurement requirements.

Where necessary to ensure valid results, measuring equipment is:

a. Calibrated or verified at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards

b. Identified to enable the calibration status to be determined

c. Safeguarded from adjustments that would invalidate the measurement result

d. Protected from damage and deterioration during handling, maintenance and storage

e. Be used under environmental conditions that are suitable for the calibrations, inspections, measurements and tests being carried out.

In addition, Manufacturing assesses and records the validity of the previous measuring results when the equipment is found not to conform to requirements. **Black Gold Pump & Supply, Inc.** takes appropriate action on the equipment and any product affected. Records of the results of calibration and verification are maintained (see 4.5)

When used in the monitoring and measurement of specified requirements, the ability of computer software (SolidWorks) to satisfy the intended application is confirmed. This shall be undertaken prior to initial use and reconfirmed as necessary.

When the equipment is provided from an external source to the organization, including third party, proprietary, employee- and customer-owned equipment, the organization shall verify that the equipment is suitable and provide evidence of conformity to the requirements of this section.

Records of the results of calibration and verification shall be maintained electronically via US Calibration website as well as hardcopies in Machine Shop office. (see 4.5).

5.9 Product Release

Black Gold Pump & Supply, Inc. shall maintain a documented procedure to ensure the release of product to the customer shall not proceed until planned arrangements (see 5.7) have been satisfactorily completed, unless otherwise approved by relevant authority and, where applicable, by the customer.

Records shall be maintained to enable identification of the individual releasing the product (see 4.5)

5.10 Control of Nonconforming Product

5.10.1 General

Black Gold Pump & Supply, Inc. ensures that product which does not conform to product requirements is identified and controlled to prevent its unintended use or delivery. The controls and related responsibilities and authorities for dealing with nonconforming product are defined in the Control of Nonconforming Product procedure (BG_830_P_MFG_ Control of Nonconforming Product_RX.X).

The procedure for addressing nonconforming product identified during product realization shall include controls for:

a. Product identification to prevent unintended use or delivery;

b. Addressing the detected nonconformity;

c. Taking action to preclude its original intended use or delivery; and

d. Authorizing its use, release, or acceptance under concession by relevant authority and, where applicable, by the customer (see 8.3.3).

The procedure for addressing nonconforming product after delivery shall include controls for:

1. Identifying, documenting, and reporting non-conformances after delivery;

2. Ensuring the analysis of product nonconformance's, provided the product or documented evidence supporting the nonconformity is available to determine root- cause (see 8.5.2).

3. Taking action to the effects, or potential effects, of the nonconformance when non-conforming product is detected after delivery.

5.10.2 Nonconforming Product

The organization shall address nonconforming product by performing one or more of the following:

a. Repair and/or rework with subsequent inspection to meet specified requirements;

b. use for alternative applications;

c. use as is under concession (see 8.3.3); and/or

d. Scrap.

e. Return to Vendor

5.10.3 Release of Nonconforming Product Under Concession

The evaluation and release under concession of nonconforming product that does not satisfy Manufacturing Acceptance Criteria (MAC) shall be permitted when the organization's relevant authority and the customer (where applicable) have authorized the release of product provided that:

a. Product(s) continue to satisfy the applicable DAC and/or customer criteria; or

b. The violated MAC are categorized as unnecessary to satisfy the applicable DAC and/or customer criteria; or

c. The DAC are changed and the products satisfy the revised DAC and associated MAC requirements.

5.10.4 Customer Notification

Black Gold Pump & Supply, Inc. shall notify customers of product not conforming to DAC or customer requirements, that has been delivered. **Black Gold Pump & Supply, Inc.** shall maintain records of such notifications (see 4.5).

5.10.5 Records

Records of the nature of nonconformities and any subsequent actions taken and maintained (see 4.5).

5.11 Management of Change

5.11.1 General

Black Gold Pump & Supply, Inc. shall maintain a process for MOC. **Black Gold Pump and Supply, Inc.** shall ensure that the integrity of the quality management system is maintained when changes to the quality management system are planned and implemented.

For MOC, **Black Gold Pump & Supply, Inc.** shall identify the potential risks (see 5.4.4) associated with the change and any required approvals prior to the introduction of such changes. **Black Gold Pump and Supply, Inc.** shall maintain records of MOC activities (see BG_544_F_ADM_Management of Change

Form_RX.X).

5.11.2 MOC Implementation

The organization shall use the MOC process for any of the following that may negatively impact the quality of the product(s) and/or service:
a) Changes in the organizational structure (see 5.5.1);
b) Changes in key or essential personnel (see 6.2);
c) Changes in critical suppliers (see 7.4.1); and/or
d) Changes to the management system procedures, including changes resulting from corrective and preventive actions (see 8.5.2 /8.5.3).

5.11.3 MOC Notification

The organization will notify relevant personnel, including the customer when ***required by contract*** of the change and residual or new risk due to changes that have either been initiated by the organization or requested by the customer.

Section 6: Quality Management System Monitoring, Measurement, Analysis, & Improvement

6.1 General

Black Gold Pump & Supply, Inc. has plans and implements the monitoring, measurement, analysis and improvement processes as needed

a. To demonstrate conformity of the product;

b. To ensure conformity of the quality management system, and;

c. To continually improve the effectiveness of the quality management system.

These processes are identified in documented procedures and include determination of applicable methods, including statistical techniques, and the extent of their use.

6.2 Monitoring, Measuring, and Improving

6.2.1 Customer Satisfaction

As one of the measurements of the performance of the quality management system, **Black Gold Pump & Supply, Inc.** monitors information relating to customer perception as to whether the organization has fulfilled customer requirements. The method for obtaining and using this information is identified in the Customer Related Processes (BG_720_P_SAM_ Customer Related Processes_RX.X) and the Management Responsibility procedures (BG_500_P_ADM_ Management Responsibility_RX.X).

6.2.2 Internal Audit

6.2.2.1 General

Black Gold Pump & Supply, Inc. conducts internal audits at planned intervals to determine whether the quality management system

a. Conforms to the planned arrangements (see 7.1), to the requirements of this International Standard and to the quality management system requirements established by the organization;

b. Is effectively implemented and maintained.

An audit program has been designed and implemented and identifies an audit schedule based on the importance of the areas to be audited, as well as the results of previous audits. The audit criteria, scope, frequency, methods, responsibilities and requirements for planning and conducting audits, and for reporting and maintaining results, are defined and documented in the Internal Audit procedure (BG_822_P_ADM_Internal Audit_RX.X).

Audits shall be performed by competent personnel independent of those who performed or directly supervised the activity being audited to ensure objectivity and impartiality of the audit process.

The management responsible for the area being audited is responsible for ensuring that any necessary corrections and corrective actions are taken without undue delay to eliminate detected nonconformities and their causes. Management responsible will be given (30) days to submit Corrective Action plan to Management Representative. After receiving and approving plan, Management will have and additional (30) days to implement Corrective Action plan and submit verification that Corrective action is implemented and effective. A follow-up audit will be scheduled to insure Corrective Action is implemented and maintained as stated in Corrective Action Plan.

All processes of the QMS claiming conformity to the requirements of this document are audited at least once a year. Group 1 consisting of Engineering, Sales, and Administration (Doc Control, Purchasing, & Human Resources) will be audited during a 1-month period. Group 2 consisting of the Pump Shop, Machine Shop, and Executive Management will be audited the following month. These 2 groups will be audited every 12 months and documented on an Internal Audit schedule.

All processes of the quality management system required to meet this specification (ISO 9001:2015 and API Q1 9th) shall be audited prior to claiming conformance to the requirements of these specifications.

6.2.3 Monitoring and Measurement of Processes

Black Gold Pump & Supply, Inc. applies suitable methods for monitoring and, where applicable, measurement of the quality management system processes. These methods demonstrate the ability of the processes to achieve planned results. When planned results are not achieved, correction and corrective action is taken, as appropriate, to ensure conformity of the product. The process for identifying and carrying out the required monitoring and measuring of processes is documented in the Monitoring, Measuring and Analysis of Product Realization Processes (BG_824_P_ENG_ Monitoring, Measuring and Analysis of Product Realization_RX.X) and Management Responsibility procedures (BG_500_P_ADM_ Management Responsibility_RX.X).

6.2.4 Monitoring and Measurement of Product

Black Gold Pump & Supply, Inc. monitors and measures the characteristics of the product to verify that product requirements are fulfilled. This is carried out at appropriate stages of the product realization process identified in Monitoring, Measuring and Analysis of Product Realization Processes (BG_824_P_ENG_ Monitoring, Measuring and Analysis of Product Realization_RX.X).

Evidence of conformity with the acceptance criteria is maintained. Records indicate the person authorizing release of product. Product release and service delivery does not proceed until all the planned arrangements have been satisfactorily completed, unless otherwise approved by a relevant authority, and where applicable by the customer.

6.3 Analysis of Data

Black Gold Pump & Supply, Inc. determines, collects and analyses appropriate data to demonstrate the suitability and effectiveness of the quality management system and to evaluate where continual improvement of the quality management system can be made. The process for determining, collecting and analyzing this data is defined in the Management Responsibility procedure (BG_500_P_ADM_ Management Responsibility_RX.X). Appropriate data includes data generated as a result of monitoring and measurement and from other relevant sources.

The analysis of data provides information relating to

a. Data from the QMS

b. Follow-up actions from previous management reviews,

c. Planned changes that could affect the quality management system,

d. An evaluation of the continuing suitability of the Quality Policy and Objectives.

e. Process performance and conformity.

f. Corrective and preventative actions. (Previous, New, and Pending)

g. Addressing and reviewing customer feedback and/or complaints.

h. Internal Quality Audits.

i. Nonconformities and product failures after delivery or use, provided the product or documented evidence is available to determine root cause.

j. Supplier Performance.

6.4 Improvement

6.4.1 General

Black Gold Pump & Supply, Inc. continually improves the effectiveness of the quality management system through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management review.

6.4.2 Corrective Action

Black Gold Pump & Supply, Inc. takes action to eliminate the cause of nonconformities in order to prevent recurrence. Corrective actions are appropriate to the effects of the nonconformities encountered.

A documented procedure (BG_852_P_MFG_ Corrective Action_RX.X) defines requirements for

a. Reviewing nonconformities (including customer complaints)

b. Determining the root- cause(s) of nonconformities

c. Evaluating the need for action to ensure that nonconformities do not recur

d. Determining and implementing action needed

e. Records of the results of action taken (see 4.5), and

f. Reviewing the effectiveness of the corrective action taken

g. MOC (see 5.7) when the corrective actions require new or changed controls within the QMS

h. Department management responsible will be given (30) days to submit Corrective Action plan to the Management Representative. After receiving and approving plan, Management will have and additional (30) days to implement Corrective Action plan and submit verification that Corrective action is implemented and effective. A follow-up audit will be scheduled to insure Corrective Action is implemented and maintained as stated in Corrective Action Plan.

6.4.3 Preventive Action

Black Gold Pump & Supply, Inc. determines action to eliminate the causes of potential nonconformities in order to prevent their occurrence. Preventive actions are appropriate to the effects of the potential problems.

A documented procedure (BG_853_P_MFG_ Preventive Action_RX.X) defines requirements for:

a. Determining potential nonconformities and their causes

b. Evaluating the need for action to prevent occurrence of nonconformities

c. Determining and implementing action needed or opportunities for improvement

d. Records of results of action taken

e. Reviewing the effectiveness of the preventive action taken

f. MOC (see 5.7) when the preventive action requires new or changed controls within the QMS.

h. Department management responsible will be given (30) days to submit Preventive action plan to the Management Representative. After receiving and approving plan, Management will have an additional (30) days to implement Preventive action plan and submit verification that Preventive action is implemented and effective. A follow-up audit will be scheduled to insure Preventive action is implemented and maintained as stated in Preventive Action Plan.

6.5 Management Review

6.5.1 General

Top management reviews the QMS bi-annually at management review meetings. This review assesses the continuing QMS applicability, adequacy and effectiveness, identifying opportunities for improvement and needs for changes. Records are maintained for each management review meeting via Management Review Agenda form.

6.5.2 Review Input

Assessment of the QMS is based on a review of information inputs to management review. These inputs include the following:

1.Effectiveness of Action Items from previous Management Review

2.Results from Quality Audits (Internal & External)

-Number of Non-Conformances:

-Number of Opportunities for Improvement:

3.Changes to current QMS

4.Analysis of Customer Feedback and/or Complaints

5.Process Performance

6.Results of Risk Assessments

7.Corrective and Preventative Status/Updates

-Open/Closed:

-Pending:

8.Review of Supplier Performance

9.Review of Product Conformity to include Non-Conformances identified after delivery or use. (Internal and External)

-Number of Non-Conformances (last 6 months)

10.Recommendation for Improvement

11. Adequacy of Resources.

12. Effectiveness of actions to dress opportunities.

Summary:

6.5.3 Review Output

During these management review meetings, management will identify appropriate actions to be taken regarding the following issues:

a. Improvement of the effectiveness of the quality management system and its processes

b. Improvement of product and/or service related to customer requirements

c. Root cause and solutions to prevent further quality issues due to production and/or performance.

d. Resource needs.

Responsibilities for required actions are assigned to members of the management review team. Any decisions made during the meeting, assigned actions, and their due dates if any are recorded in the minutes of management review.

QUALITY SYSTEM MANUAL REVISIONS

REV.	Change Description	DATE	AUTHORIZED BY
1.0	Initial Release	10-22-12	Chris Nonato
1.1	Revised based on first GAP analysis	12-17-12	Chris Nonato
1.2	Reviewed and revised sections to incorporate API Q1	8-22-14	Chris Nonato
1.3	Reviewed and revised per Internal Audit findings. Also included cross-reference table between API Q1 9th and ISO 9001:2015	9-22-14	Chris Nonato
1.4	Reviewed and revised per API Q1 Certification audit. Updated distribution list, Removed Org Chart, MOC process updated, Updated Core Business Functions & QMS Process Interactions, and sections in Purchasing process updated. See MOC records for details.	3-18-15	Chris Nonato
1.5	Updated Quality Manual to include Annex A (Informative) Use of API Monogram by Licensees Replaced “Black Gold Pump & Supply, Inc.” with “Black Gold Pump & Supply, Inc.	3-15-16	Chris Nonato

1.6	Updated 4.1 General Requirements section d and 4.2.1 General Documentation Requirements section b3 per BG_CA_00045_BG_API Q1_Surveillance Audit_032116. Updated Internal Audit section with the following: 'Group 1 consisting of Engineering, Sales, and Administration (Doc Control, Purchasing, & Human Resources) will be audited during a 1-month period. Group 2 consisting of the Pump Shop, Machine Shop, and Executive Management will be audited the following month. These 2 groups will be audited every 6 months and documented on an Internal Audit schedule.' Also, updated header Black Gold Pump & Supply, Inc. logo.	Chris Nonato
1.7	Revise and Re-number QMS to reflect API Q1 9th Edition Standard. Also, integrating ISO 9001:2015 requirements.	Chris Nonato

Annex A
(Informative)
Use of API Monogram by Licensees

A.1 Scope

The API Monogram® is a registered certification mark owned by API and authorized for licensing by the API Board of Directors. Through the API Monogram Program (www.api.org/certification-programs/apimonogram-program-and-apiqr.aspx), API licenses product manufacturers to apply the API Monogram to new products that comply with product specifications and have been manufactured under a quality management system that meets the requirements of API Q1. API maintains a complete, searchable list of all Monogram Licensees on the API Composite List website(http://compositelist.api.org).

The application of the API Monogram and license number on products constitutes a representation and warranty by the Licensee to API and to purchasers of the products that, as of the date indicated, the products were manufactured under a quality management system conforming to the requirements of API Q1 and that the product conforms in every detail with the applicable standard(s) or product specification(s). API Monogram Program licenses are issued only after an on-site audit has verified that an organization has implemented and continually maintained a quality management system that meets the requirements of API Q1 and that the resulting products satisfy the requirements of the applicable API product specification(s) and/or standard(s). Although any manufacturer may claim that its products meet API product requirements without monogramming them, only manufacturers with a license from API can apply the API Monogram to their products.

Together with the requirements of the API Monogram license agreement, this annex establishes the requirements for those organizations who wish to voluntarily obtain an API license to provide API monogrammed products that satisfy the requirements of the applicable API product specification(s) and/or standard(s) and API Monogram Program requirements.

For information on becoming an API Monogram Licensee, please contact API, Certification Programs,

1220 L Street, NW, Washington, DC 20005 or call 202-682-8145 or by email at certification@api.org.

A.2 Normative References
API Q1, *Specification for Quality Management System Requirements for Manufacturing Organizations for the Petroleum and Natural Gas Industry*

A.3 Terms and Definitions
For purposes of this annex, the following terms and definitions apply.

A.3.1 API Monogrammable Product
Product that has been newly manufactured by an API Licensee utilizing a fully implemented API Q1 compliant quality management system and that meets all the API-specified requirements of the applicable API product specification(s) and/or standard(s).

A.3.2 API Product Specification
Prescribed set of rules, conditions, or requirements attributed to a specified product that address the

definition of terms; classification of components; delineation of procedures; specified dimensions; manufacturing criteria; material requirements, performance testing, design of activities; and the measurement of quality and quantity with respect to materials; products, processes, services, and/or practices.

A.3.3 API-Specified Requirements
Requirements, including performance and Licensee-specified requirements, set forth in API Q1 and the applicable API product specification(s) and/or standard(s).

NOTE Licensee-specified requirements include those activities necessary to satisfy API-specified requirements.

A.3.4 Design Package
Records and documents required to provide evidence that the applicable product has been designed in accordance with API Q1 and the requirements of the applicable product specification(s) and/or standard(s).

A.3.5 Licensee
Organization that has successfully completed the application and audit process and has been issued a license by API.

A.4 Quality Management System Requirements
An organization applying the API Monogram to products shall develop, maintain, and operate at all times a quality management system conforming to API Q1.

A.5 Control of the Application and Removal of the API Monogram
Each Licensee shall control the application and removal of the API Monogram in accordance with the following:
a) Products that do not conform to API-specified requirements shall not bear the API Monogram.
b) Each Licensee shall develop and maintain an API Monogram marking procedure that documents the marking/monogramming requirements specified by this annex and any applicable API product specification(s) and/or standard(s). The marking procedure shall:
1) define the authority responsible for application and removal of the API Monogram;

2) define the method(s) used to apply the Monogram;
3) identify the location on the product where the API Monogram is to be applied;
4) require the application of the Licensee's license number and date of manufacture of the product in conjunction with the use of the API Monogram;
5) require that the date of manufacture, at a minimum, be two digits representing the month and two digits representing the year (e.g. 05-12 for May 2012) unless otherwise stipulated in the applicable API product specification(s) or standard(s); and
6) require controls for the application of the additional API product specification(s) and/or standard(s) marking requirements, as applicable.

c) Only an API Licensee shall apply the API Monogram and its designated license number to API monogrammable products.
d) The API Monogram license, when issued, is site-specific and subsequently the API Monogram shall only be applied at that site specific licensed facility location.

e) The API Monogram may be applied at any time appropriate during the production process but shall be removed in accordance with the Licensee's API Monogram marking procedure if the product is subsequently found to be out of conformance with any of the requirements of the applicable API product specification(s) and/or standard(s) and API Monogram Program.
For certain manufacturing processes or types of products, alternative API Monogram marking procedures may be acceptable. Requirements for alternative API Monogram marking are detailed in the API Policy, *API Monogram Program Alternative Marking of Products License Agreement*, available on the API Monogram Program website at http://www.api.org/alternative-marking.

A.6 Design Package Requirements
Each Licensee and/or applicant for licensing shall maintain a current design package for all of the applicable products that fall under the scope of each Monogram license. The design package information shall provide objective evidence that the product design meets the requirements of the applicable and most current API product specification(s). The design package(s) shall be made available during API audits of the facility.
In specific instances, the exclusion of design activities is allowed under the Monogram Program, as detailed in *Advisory #6*, available on API Monogram Program website at http://www.api.org/advisories.

A.7 Manufacturing Capability
The API Monogram Program is designed to identify facilities that have demonstrated the ability to manufacture equipment that conforms to API specifications and/or standards. API may refuse initial licensing or suspend current licensing based on a facility's level of manufacturing capability. If API determines that additional review is warranted, API may perform additional audits (at the organization's expense) of any subcontractors to ensure their compliance with the requirements of the applicable API product specification(s) and/or standard(s).

A.8 API Monogram Program: Nonconformance Reporting
API solicits information on products that are found to be nonconforming with API-specified requirements, as well as field failures (or malfunctions), which are judged to be caused by either specification deficiencies or nonconformities with API-specified requirements. Customers are requested to report to API all problems with API monogrammed products. A nonconformance may be reported using the API Nonconformance Reporting System available at http://compositelist.api.org/ncr.asp.