71-0900

Washington
Energy & Environment

June 21, 2006 EPD-Q-06:021

U. S. Nuclear Regulatory Commission
Attention: Mr. Frank Jacobs
11555 Rockville Pike MS-013D-13
Rockville, MD 20852-2738

Subject: QUALITY MANAGEMENT PLAN

Dear Mr. Jacobs:

We have completed the revision of our Quality Management Plan and I am sending this to you for review.

The changes to our program are administrative in nature and deal with our organization's name change not program content. Per our recent conversation, please expedite the review of this document. We are holding off on making any of these changes until we hear from you.

Thank you for your efforts in providing a timely review of this document.

Sincerely,

Matt J. Leroch, III
Quality Assurance Manager

Enclosure

NMSS01

GTSD/QA-100

Quality Management Plan
Revision 7

05/17/06

Washington Government Environmental Services Company, LLC
Government Technical Services Division
Engineered Products Department

TABLE OF CONTENTS

INTRODUCTION

This document is the Quality Management Plan (QMP) for Washington Government Environmental Services Company, LLC, Government Technical Services Division (GTSD), Engineered Products Department (EPD), a subsidiary of Washington Group International. GTSD is committed to the delivery of quality products and services of superior value that satisfy customer needs.

The GTSD organization was established to be responsive to defense, energy, utility, and other government and industry needs in the United States and throughout the world. The QMP has been developed to meet the regulatory, industry, and customer requirements of this differing customer base. This plan has been prepared to be responsive to and appropriate for meeting all customer quality assurance requirements and to comply with the criteria of ASME/ANSI NQA-1; the requirement of Title 10, Code of Federal Regulations (CFR), Part 71, Subpart H (10CFR71); Title 10, CFR, Part 72, Subpart G (10CFR72) and Title 10, CFR, Part 50, Appendix B (10CFR50).

While the QMP addresses the requirements of NQA-1, 10CFR50, 10CFR71, and 10CFR72, it has provisions for being responsive to unique regulatory, industry, and customer requirements that may vary from or be in addition to these requirements.

This QMP applies to all GTSD personnel and to those activities that contractually require implementation of this quality program. It defines the basic policies and requirements and is our commitment to our customers and regulatory agencies. It serves as a directive for all personnel in establishing procedures and work instructions for their work activities and to all employees in carrying out their work activities. Responsibility for this QMP resides with the owner and sponsor of the Quality Assurance (QA) Program, the; General Manager of the Government Technical Services Division.

Bruce J Kaiser

Bruce Kaiser
General Manager
Government Technical Services Division

1. ORGANIZATION

1.1 Policy Statement

It is the policy of GTSD to be a reliable supplier of high quality products and services by ensuring that project performance, schedule, and cost goals are effectively achieved.

The GTSD Quality Assurance Program is primarily intended for use by GTSD, however, other units within Washington Group International may work under the GTSD Quality Assurance Program with the prior written authorization from the GTSD General Manager. The work unit working to the quality assurance program is responsible for complying with requirements of the program. GTSD is responsible for establishing oversight of the unit working to the program to determine compliance with the program requirements.

1.2 Policy Commitment

GTSD management personnel are responsible for ensuring the implementation of this policy, communicating it to all employees, and responding to issues regarding its application.

GTSD employees are expected to perform their roles in conformance with quality requirements, to contribute to prevention of nonconforming situations and items, and to continuous improvement in performance and effectiveness of the quality system.

Bruce J. Kaiser
General Manager, GTSD

Quality Assurance Mgr., GTSD

1.3 Organization and Responsibilities

The assurance of quality in the GTSD Engineered Products Department involves all employees. Work is structured such that:

- Each person performing a task is responsible for completing that task in conformance with established procedures and work instructions and for verifying that the completed task conforms with specified requirements.
- Additional verification of key activities is performed by qualified personnel independent of those having direct responsibility for the work being performed.

Activities associated with quality assurance are performed by personnel that have independence from cost and schedule considerations, have sufficient organizational freedom and authority to identify nonconforming conditions, participate in determining corrective actions, and verify implementation of corrective actions. The manager of quality assurance has the authority to stop work and delivery of nonconforming items and services.

The organizational structures and the interrelationships between the functional groups within each organization are found in organization charts maintained by the manager of each organization. The key responsibilities of each manager within each organization are listed below. Responsibilities may be performed by subordinates; however, ultimate responsibility rests with the functional group managers.

1.4 Responsibilities

1.4.1 GTSD Responsibilities

The responsibilities of the GTSD managers are described below.

1.4.1.1 GTSD General Manager

The GTSD General Manager is responsible for:

- defining the Quality Policy.
- sponsoring and approving the QMP.
- establishing a culture which promotes conformance to requirements and continuous quality improvement.
- ensuring appropriate resources are allocated to meet quality requirements.

- participating in reviews of the status of the quality system and initiating action as appropriate to ensure continuous improvement.

- leading the QA Program through personal involvement in the quality system.

1.4.1.2 Quality Assurance Manager

The Quality Assurance Manager is responsible for:

- maintaining a documented quality system that complies with Quality Program commitments.

- monitoring programs for the correction of the causes of failure to meet requirements and for preventing them in the future.

- verifying the effectiveness of quality improvement initiatives.

- coordinating the activities of other departments in actions related to the resolution of internal and customer related quality problems.

- representing the QA organization to customers and other outside interfaces on matters of quality.

- maintaining a system for identifying, documenting, and assuring resolution of nonconformances and deficiencies.

- evaluating suppliers of certain products and services to ensure capability to meet requirements.

- monitoring suppliers performance and taking action to address unacceptable performance.

- establishing and administering a program for the calibration and control of inspection, measuring, and test equipment.

- participating in establishing criteria for, and verification of, procured products and services.

- conducting source, receipt, in-process, and final product inspections/tests, evaluating the results and providing

documentation which defines verification methods and criteria and provides records of results.

- establishing and maintaining a document control system.
- establishing and maintaining a quality records system.
- providing guidance and direction to other departments in the implementation of the quality system.
- assuring this QMP remains consistent with the requirements of ISO 9002, NQA-1, 10CFR50, 10CFR71 and 10CFR72.
- acting as a focal point for employees to report issues concerning the quality system and for coordinating action for changes and improvements to the quality system.

1.4.2 EPD Responsibilities

The responsibilities of the EPD managers are described below.

1.4.2.1 EPD Plant Manager

The Plant Manager (PM) of EPD is responsible for:

- directing plant operations and maintenance activities.
- providing facilities, working conditions, and trained manpower capable of meeting the business needs.
- manufacturing products that comply with specification requirements.
- identifying and promptly correcting the causes of manufacturing related problems.
- improving manufacturing capabilities and effectiveness as needed to meet industry requirements and business requirements.
- establishing and administering training programs to meet business needs and to provide development opportunities for employees.
- reviewing the bidding of new projects and contract review of new orders to provide oversight necessary to avoid contractual

conflicts as well as assisting in allocation of personnel, equipment, and financial resources to enhance contract success.

- planning the manufacturing work flow and matching the facilities and equipment to fit the work flow.
- overseeing the day-to-day manufacturing activities.
- assuring fabrication and assembly operations are performed in accordance with specified requirements.
- controlling the handling and flow of product to maintain proper identification and sequence of operations.
- reporting situations which do not comply with quality requirements to Quality Assurance.
- identifying and correcting operations and activities that are contributing to nonconformances.

1.4.2.2 Human Resources Manager

The Human Resources Manager is responsible for:

- recognizing the impact of the human factor on quality and optimizing the match of employees and jobs.
- contributing to a work force capable of meeting quality requirements by establishing and implementing procedures for the recruiting, selection, placement, evaluation, and upgrading of employees.
- communicating information regularly to all employees on the need for and the importance of always meeting organization requirements.
- establishing and coordinating programs that enhance employees quality of performance and teamwork.

1.4.2.3 Plant Technical Services Manager

The Plant Technical Services Manager (PTS) is responsible for:

- managing the day-to-day work activities of project managers and engineers.
- maintaining an interface with key customers for planning and scheduling the production activities of the organization.
- performing as the liaison for customers on major projects to assure contractual issues produce minimal impact on successful contract fulfillment.
- coordinating and/or supporting the development and implementation of new or modified manufacturing processes and equipment.
- providing detailed work sequences and instructions to manufacturing personnel as required.
- incorporating quality, reliability, and safety into the design of the product.
- developing product designs that meet customer requirements and comply with applicable government and industry codes and standards.
- supporting research and development efforts as required.
- assisting other internal organizations in the evaluation of new customer orders which involve new design or quality requirements.
- coordinating the activities of other internal organizations in addressing customer problems.

1.4.2.4 Material/Purchasing Manager

The Material/Purchasing Manager (MPM) is responsible for:

- selecting suppliers who are capable of complying with requirements.
- using only suppliers who have been determined to be acceptable for the products and services being purchased.
- keeping suppliers informed of changes to the requirements.

- jointly working with suppliers on corrective action and quality improvement issues.
- receipt of all materials.
- coordinating with QA for receipt inspection of material.
- shipping and receiving personnel responsible for identification, control, handling, and timely, accurate issuance of material for fabrication per the MQPT.

1.4.2.5 Marketing and Sales Manager

The Marketing and Sales Manager (MSM) is responsible for:

- oversight of sales and marketing activities.
- coordinating the proposal efforts of the organization and maintaining an interface with key customers for contractual issues.
- maintaining the estimating and bidding system.
- evaluating customer requirements and developing proposals and response to customer requests for proposals.

1.5. Management Review

GTSD's General Manager and EPD's Plant Manager shall review the organization's quality management system performance through an annual Quality System Audit to ensure its continuing suitability, adequacy and effectiveness.

This review shall include assessing opportunities for improvement and the need for changes to the quality management system, including the quality policy and quality objectives.

The output from the review shall include any decisions and actions related to:

- improvement of the effectiveness of the quality management system and its processes,
- improvement of product related to customer requirements,
- resources, or
- training needs.

A comprehensive review of the QA Program shall be performed on a yearly basis. This review shall be in the form of an annual QA report developed by the Quality Assurance Manager and approved by the GTSD General Manager. The annual report shall address the following as a minimum:

- number and type of nonconformances,
- number and type of audits and results,
- corrective actions taken,
- number of significant conditions adverse to quality,
- root causes and results,
- statistics on manufacturing defects and Non Destructive Examination (NDE).

2. QUALITY SYSTEM

GTSD has established its quality system to be responsive to customer requirements and the needs of the business. The system has been developed to meet the requirements of NQA-1, 10CFR50, 10CFR71 and 10CFR72. The system also responds to the variety of customer requirements that are specific to GTSD projects. For those projects where additional customer requirements apply, unique project procedures are prepared to comply with the specific customer requirements.

2.1 Quality System Implementation

The GTSD General Manager has the ultimate and overall responsibility for implementation of the quality system. Managers are responsible for ensuring that their activities are in compliance with the applicable parts of the quality system. All employees are responsible for complying with the requirements of the quality system that apply to their work scope and for initiating improvements that they identify in any of the documentation.

The Quality Assurance Manager is responsible for coordinating the development and implementation of the quality system.

The PTS Manager is responsible for implementing project specific procedures that are required to meet customer requirements.

Department managers are responsible for developing, implementing and/or maintaining work instructions within their scope of responsibility.

2.2 Training

The training program includes procedures for training as needed, and maintenance of training records. It is policy to only assign qualified personnel to work activities that

have impact on the quality system, and to use training as a means of maintaining and enhancing employees' job proficiency.

All positions have documented descriptions that delineate the minimum education and experience required as well as a list of duties that may be performed by persons within each position. Prior to initial hiring or promotion, education, experience, and training of candidates are evaluated to determine if qualified.

Training is administered by appropriate personnel including the training coordinator, cognizant company personnel, and selected external trainers. Managers and/or Training determine the trainer needed to provide the training developed during the planning stage. Training is documented and these records are maintained either within the employee's organization or in Training.

Personnel performing special processes such as welding and nondestructive testing, those performing inspection and/or testing, and those functioning as lead auditors are trained and certified in accordance with established procedures. Only certified personnel perform special processes or lead audits.

NOTE: In accordance with corporate policy, certain records related to qualification of employees may be maintained in confidential personnel files and not be available for inspection.

3. DESIGN CONTROL

GTSD controls design activities and the design of its products to ensure that the design and associated documentation meet applicable requirements. Design control contributes to the successful introduction of new and modified projects and the successful production of new and proven products during procurement, manufacture, testing and inspection. Design control also ensures that design changes are properly evaluated and implemented.

Procedures are established and maintained for the review of all customer orders to ensure understanding of requirements, resolution of requirement conflicts, capability to comply with requirements, and communication of order information to involved groups. The QSP manual addresses implementation of the specific requirements.

4. PROCUREMENT DOCUMENT CONTROL

The procurement of materials, products, and services is performed in a controlled process, using approved procedures that ensure that the items purchased meet the specified requirements and fulfill the needs of the organization. Purchasing has the lead role in developing and administering the purchasing process. Plant Technical Services provide support as necessary to ensure inclusion of all pertinent technical data and customer

requirements have been included in the scope of work, Quality assurance ensures that all pertinent quality requirements have been addressed in the scope of work. The QSP manual addresses implementation of the specific requirements.

5. INSTRUCTION, PROCEDURES, AND DRAWINGS

The GTSD system of documentation that provide a systematic approach from policy to practice. The system also responds to the variety of customer requirements that are specific to GTSD projects. For those projects where additional customer requirements apply, unique project procedures are prepared to comply with the specific customer requirements. The QSP manual addresses implementation of the specific requirements.

In order to satisfy department needs or customer requirements for specific projects that are above and beyond, unique, or different from the QMP and QSP, project specific procedures are developed. The department manager, assigned project manager, or other appropriate personnel are responsible for the preparation, and revision of these procedures and for ensuring they are properly implemented by the department or project.

Work instructions provide direction to employees for conforming to quality system procedures where greater detail is required than is included in the procedures. Each organization is responsible for determining work instruction needs, and preparing and controlling their use. The primary categories of work instructions are:

- engineering requirement documents such as drawings and specifications,
- operations/fabrication instruction documents,
- detailed procedures/instructions for quality affecting activities such as non-destructive testing and examination, equipment calibration, maintenance manuals, etc., and
- nonconformance documents that provide definition and instructions for dispositioning of nonconforming materials and products.

Documents prescribing work activities provide sufficient requirements related to features, attributes, and quality to facilitate adequate determination of acceptance criteria for verification activities.

6. DOCUMENT CONTROL

Document and data control systems establish requirements for controlling the issue and use of documents that affect quality. Document Control ensures that quality-related documents are filed and maintained in an appropriate manner. Document control provides for the issue, distribution, recall, revision, and change of documents that relate to the quality system and to the delivery of quality products. The QSP manual addresses implementation of the specific requirements.

Document Control is responsible for the administration of all documents determined to be under Document Control.

Document Control responds to requests from other groups to add to or delete documents from the document control system. They interact as necessary with requesting groups to establish control for new documents that meet the established provisions.

GTSD departments that develop or originate documents are responsible for determining if the documents are to be included in the controlled system. This decision is on the basis of the document's relationship to the quality system and the delivery of quality products. To include a document in the system, the initiating organization interacts with Document Control to subject the document to the established provisions and enter it into the system.

The organization responsible for the content of a controlled document is responsible for preparing the content of the revision, and routing it to Document Control for review and approval. Document Control processes the revisions in accordance with the provisions for control of the original document.

7. CONTROL OF PURCHASED ITEMS AND SERVICES

The procurement of materials, products, and services is performed in a controlled process, using approved procedures that ensure that the items purchased meet the specified requirements and fulfill the needs of the organization. Such control shall provide for the following as appropriate: source evaluation and selection, evaluation of objective evidence of quality furnished by the supplier, source inspection, audit, and examination of items or services upon delivery or completion. The QSP manual addresses implementation of the specific requirements.

8. IDENTIFICATION AND CONTROL OF ITEMS

Materials, components, parts, and products are identified in a manner that provides necessary information for traceability to be responsive to customer requirements. PTS and Quality Assurance personnel ensure that identification and traceability requirements are adequately translated from customer procurement documents and included as applicable in GTSD procurement documents and throughout fabrication activities. Employees involved in using the items are responsible for ensuring they are properly identified and retain their identification. The QSP manual addresses implementation of the specific requirements.

8.1 Item Identification

Methods of product identification are employed to assure products remain traceable to their origins during initial storage, issuance to production, all phases of fabrication, interim storage, final assembly, and preparation for shipment. A variety of methods may be used depending on factors such as criticality of the product and internal and/or external requirements. The identification may be a unique number that differentiates the product from similar product or it may be a number that identifies the product as part of a lot or group of similar product. Identification may be applied direct to the product, to a container holding the product, or to documentation accompanying the product.

The Plant Manager ensures the identification remains with the items and transfers physical markings when necessary as the items move through the fabrication processes.

8.2 Item Traceability

Project managers identify specific project traceability requirements during contract review. The manufacturing engineer includes the requirements on purchase requisitions and in operations/fabrication planning information. Purchasing includes the requirements for traceability documentation such as heat numbers, lot runs, chemical and physical analysis, and test results on the purchase order. Based upon the purchase order requirements, receiving verifies the suppliers' conformance to the requirements and maintains a copy of the documentation in the receiver file. Other traceability requirements, such as product serial number traceability, are included in the traveler documentation. Operations personnel maintain the documentation necessary to meet the traceability requirements.

9. CONTROL OF PROCESS

Work activities are planned and performed under controlled conditions that ensure conformance to customer requirements, quality system requirements and applicable standards and regulations. Management is responsible for ensuring only properly trained and qualified personnel are assigned to accomplish the work activities and that they are provided adequate facilities, equipment, tools, and information to perform their work in compliance with requirements. The QSP manual addresses implementation of the specific requirements.

9.1 Process Requirements

PTS will prepare project work packages that provide requirements for manufacturing activities. A "traveler" document is the basic information source in the work package. It typically includes or references the sequence of manufacturing steps, specific work instructions, inspection and test points, bill of material, applicable drawings, and other project specific requirements that apply. It also references, as appropriate,

manufacturing and quality assurance procedures that relate to the work activities defined in the traveler. Controlled files of drawings and procedures are maintained at key locations in the work area(s).

9.2 Controlling Manufacturing Processes

Personnel performing work activities are responsible for evaluating their own work and verifying its conformance to requirements. Throughout the stages of the manufacturing process, the traveler indicates points where independent inspections and tests are to be performed by Quality Control. Both the manufacturing personnel and the quality control personnel indicate their accomplishment of the required activity by initialing the traveler, or other appropriate method. Where understanding of requirements is enhanced by the use of workmanship standards, such as photographs, work samples, and sketches, manufacturing and/or quality assurance is responsible for ensuring the workmanship standards are maintained to reflect current standards.

9.3 Process Qualifications

Processes such as welding and nondestructive examination (NDE) require formal qualification of the procedure, equipment, and personnel to provide confidence in the output. The responsible organization for these processes develops criteria for qualification, performs the qualifications, maintains records of qualification, performs requalifications as necessary, and ensures only qualified equipment, procedures, and personnel are used to perform these processes. Welding qualification, including personnel qualification, is performed in accordance with procedures that comply with ASME Code Section IX, AWS, or other specified requirements. NDE, including personnel qualification, is performed in accordance with procedures that comply with ASNT-TC-1A or other specified requirements.

10. INSPECTION

Inspections are performed under controlled conditions using documented procedures and qualified personnel to ensure that only those items that conform to the requirements are installed or used in customers' products. This control includes the use of prescribed acceptance criteria and calibrated equipment that is adequate for its intended application. The QSP manual addresses implementation of the specific requirements.

10.1 Receiving Inspection

Purchased items, whether purchased directly or through subcontractors, are verified for acceptance prior to being released for manufacturing. Quality Control/Assurance and Receiving perform the verification by source inspection at the supplier location, receiving inspection, and/or receiving evaluation.

10.2 In-Process Inspections

The work packages indicate points in the manufacturing process where in-process inspections are to be performed. PTS routes drafts of work package documents to Quality Assurance to verify or modify the positioning of inspection and test points in the manufacturing process. The points are identified as either in-process monitoring, witness points, or hold points. Hold points must be completed before subsequent steps in the manufacturing process are performed unless specified criteria are satisfied. Witness points are performed, unless other priorities require waiving the inspections, by the Quality Assurance Manager. Any waiver will be documented.

In-process inspections are performed in accordance with criteria included in the work package, on drawings, or in procedures or specifications. The drawings and procedures are available in controlled files in specified work locations.

10.3 Final Inspection and Testing

A final hold point may be included in the work package for final inspection of the product prior to its release for shipment. These activities are performed in accordance with criteria in the work package, on drawings, or in procedures or specifications. Drawings, procedures, and specifications are available in controlled files in specified work locations.

11. TEST CONTROL

Tests are performed under controlled conditions using documented procedures and qualified personnel to ensure that only those items that conform to the requirements are installed or used in customers' products. This control includes the use of prescribed acceptance criteria and calibrated equipment that is adequate for its intended application. The QSP manual addresses implementation of the specific requirements.

11.1 In-Process Testing

The work packages indicate points in the manufacturing process where in-process tests are to be performed. PTS routes drafts of work package documents to Quality Assurance to verify or modify the positioning of inspection and test points in the manufacturing process. The points are identified as either in-process monitoring, witness points, or hold points. Hold points must be completed before subsequent steps in the manufacturing process are performed unless specified criteria are satisfied. Witness points are performed, unless other priorities require waiving the inspections, by the Quality Assurance Manager. Any waiver will be documented.

In-process tests are performed in accordance with criteria included in the work package, on drawings, or in procedures or specifications. The drawings and procedures are available in controlled files in specified work locations.

11.2 Final Inspection and Testing

A final hold point may be included in the work package for final test of the product prior to its release for shipment. These activities are performed in accordance with criteria in the work package, on drawings, or in procedures or specifications. Drawings, procedures, and specifications are available in controlled files in specified work locations.

12. CONTROL OF MEASURING AND TEST EQUIPMENT

Gauges and instruments used to verify quality are maintained in a formal calibration system. The selection of inspection, measuring, and test equipment is made with consideration for the application and needed accuracy. The items are listed in a computer calibration program maintained by Quality Assurance. The QSP manual addresses implementation of the specific requirements.

The M&TE coordinator monitors the due dates on a regular basis and retrieves the items to be calibrated. The M&TE coordinator either calibrates the items or sends them to an approved supplier to be calibrated. The M&TE coordinator performs the calibration with master standards that are traceable to the National Institute of Standards and Technology and are recalibrated on a planned basis. The M&TE coordinator performs the calibrations in accordance with documented procedures in a laboratory setting that is environmentally controlled. Each item is marked with its unique identification number and next scheduled calibration date on the item itself, on its container, or on an attached tag.

An item that is determined to be damaged or out of calibration is taken out of service. If appropriate, the M&TE coordinator is responsible for initiating an evaluation which could result in appropriate actions to reinspect or recall the product, based on the criticality of the parameter, which was verified by an item that is found to be out of calibration.

13. HANDLING, STORAGE AND SHIPPING

GTSD has established procedures to ensure that materials and products are handled, stored, packaged, preserved, and delivered under controlled conditions that satisfy codes, standards, regulations, designs, and/or special customer requirements. These procedures provide requirements to employees for their roles in controlling materials and products from the point of receipt from suppliers to the satisfactory delivery to the customer's destination. The QSP manual addresses implementation of the specific requirements.

13.1 Handling

Material control has primary responsibility for handling materials and products received from suppliers. The Plant Manager has primary responsibility for the selection, use, and maintenance of equipment for handling materials and products throughout the manufacturing cycle.

The PTS Manager is responsible for defining special handling requirements that may be essential to maintain material and product integrity and communicating them to material control and/or operations for implementation.

13.2 Storage

All items to be stored are properly identified and located in areas that provide adequate control of flow in and out and minimize opportunity for inappropriate use of stored items. The project engineer is responsible for defining special storage requirements that may be necessary to their designs and including the requirements in drawings or specifications. Material control is responsible for establishing procedures for and controlling the storage of purchased items prior to release to operations and finished goods prior to delivery to customers. The Material/Purchasing Manager and the Plant Manager are responsible for establishing procedures for assessing their storage areas on a planned frequency for adequacy of their storage systems and condition of the stored items. They are responsible for documenting the results of the assessments and initiating corrective action to address deficiencies that are discovered.

13.3 Shipping

Products are delivered with required documentation, in compliance with applicable shipping regulations, and with proper identification to ensure safe arrival at the customer destinations.

Material control is responsible to assure qualified carriers are used, products are properly loaded and secured in the shipping vehicles, and proper identification and markings are included on the packaged products.

Material control is also responsible for coordinating the resolution of any issues that are raised regarding the delivery of products.

14. INSPECTION, TEST AND OPERATING STATUS

Techniques are in place to provide visible evidence that materials and products have been subjected to the required inspection and test operations at appropriate points in the

manufacturing process. The QSP manual addresses implementation of the specific requirements.

14.1 Incoming Items

Received items from suppliers are held in receiving until their acceptability has been determined. Nonconforming items are identified and segregated. Acceptance of items is documented on the receiver documents that are retained as verification of acceptance of the items. The accepted items are placed in received material inventory. Their formal release to manufacturing is documented in the applicable work package or in an appropriate manner.

14.2 In-Process Items

Inspectors performing in-process inspection and tests indicate acceptance by entry on the traveler document in the work package, or other appropriate method. The entry includes the identification of the person performing the inspection and the date of acceptance/status. The work package remains with the product and provides visibility of inspections and tests that have been successfully accomplished as well as inspections and tests yet to be performed.

14.3 Finished Product

Inspectors performing finished product inspections indicate acceptance by entry on the traveler document in the work package, or other appropriate method. The entry includes the identification of the person performing the inspection and the date of acceptance. As part of the data package preparation, a review of the work package to verify that all required inspections and tests have been successfully completed is performed. If the completion of a required inspection or test is not indicated in the work package, the product is held until verification that the inspection or test was performed or the missed inspection or test is performed at this stage. If neither can be accomplished, the inspector documents the situation as a nonconformance and holds the product until disposition of the nonconformance is received and satisfactorily completed.

15. CONTROL OF NONCONFORMING ITEMS

Material and product that is found at any stage of the process to not conform to requirements is considered nonconforming or deficient. Nonconforming material is identified and/or segregated from the production areas to prevent unintended use of the material. Procedures are in place to control nonconforming materials and items. The QSP manual addresses implementation of the specific requirements.

16. CORRECTIVE ACTIONS

Corrective and preventive action results from audit findings, surveillances, customer feedback, deficiency reports, performance feedback, and other sources of information which identify opportunities to correct or prevent detractors from quality. Corrective and preventive action projects complement the ongoing correction of deficiencies and other problems that occur in the normal course of doing business. The QSP manual addresses implementation of the specific requirements.

Corrective and preventive action is addressed as a closed-loop system that generally includes the following elements:

- data gathering,
- data analysis, problem identification, cause determination, root cause evaluation (if required), and problem reporting,
- planning and implementing the corrective and action to prevent recurrence,
- reporting to appropriate management, and
- follow-up to verify effectiveness of the actions.

17. QUALITY ASSURANCE RECORDS

Quality records are prepared in a legible manner to provide documentary evidence of the quality of products, compliance to the quality system, and accomplishment of activities affecting quality. Records retention processes are consistent with applicable codes, specifications, standards, and/or customer/contract requirements and are used in managing the quality system. Other sections of this manual and the QSP identify requirements for specific records to be prepared and retained. Records are maintained in fire-resistant file cabinets or duplicate storage is employed prior to submittal to the approved storage facility. The QSP manual addresses implementation of the specific requirements.

18. AUDITS

A program of planned and documented audits verifies compliance with the elements of the Quality Management Plan and identifies opportunities for continually improving the quality system. The Quality Assurance Manager is responsible for planning and coordinating the internal audit program. The QSP manual addresses implementation of the specific requirements.

The Quality Assurance Manager is responsible for developing an annual audit plan that is designed to assess conformance to the policies and requirements defined in this manual. The plan shall ensure that activities relating to every element of the manual are audited at least

annually. The audit plan must also consider the importance of the elements and schedule the more critical ones on a more frequent basis. Criteria to be considered in developing the plan include:

- previous audit results to provide insight into historical strengths and weaknesses,
- customer feedback to provide an independent view of areas of concern, and
- input from other departments regarding areas of concern.

The Quality Assurance Manager is responsible for coordinating the implementation of the audit plan and revising the plan as appropriate to be responsive to changing business conditions and priorities.

Audits are conducted in accordance with the audit procedure that defines requirements for the preparation, performance, reporting, and closure of audits.

The Quality Assurance Manager is responsible for developing and coordinating a process that ensures all internal audits are led by lead auditors qualified to the requirements of ASME NQA-1, Supplement 2S-3. Assignment of audit team members are made such that employees do not audit their own areas of responsibility.