

MSQ-1 General Quality Assurance Requirements

Guidance: A, B, C, D, E, F, G, H, I, J, K, L, M, N and O all apply when MSQ-1 is required. Exclusions will be noted on the Purchase Order.

A. PROHIBITED PRACTICES

1. Unauthorized Repairs: Seller **shall** not repair any damaged item, or any item found to be faulty during manufacturing or that fails to meet Buyer specification/drawing requirements, without Buyer's written approval, except when the nonconformance is minor and Material Review Board (MRB) authorization has been granted by Northrop Grumman. Seller is not authorized to perform MRB activities on non-conforming materials without Buyer authorization.
2. Change in Approval, Drawing, Processes, Materials, or Procedures: Seller **shall** not change any drawing, process, material (including sub-tier supplier parts), or procedure without prior Buyer's written approval, if such drawing, process, material, or procedure was used to qualify items or which was used by Seller to become a qualified source.
3. Seller **shall** notify Buyer in writing of any proposed change in design, fabrication method, or process prior to delivery of the item to the Buyer.
 - a. Articles, which have incorporated approved changes, **shall** be appropriately identified.
4. Resubmittal of Rejected Items: Any item rejected by Buyer and subsequently resubmitted to Buyer **shall** be clearly identified as a resubmitted item, indicating the procurement document number and Buyer's reject document number in Seller's Certificate of Conformance.
5. Notification of Facility Change: Seller **shall** not use any production, manufacturing, and/or processing facilities that differ from facilities previously approved by Buyer without first notifying Buyer and affording Buyer an opportunity to examine and approve such facilities for compliance with procurement quality requirements. Seller **shall** not relocate any production, manufacturing, and/or processing facilities previously approved by Buyer without first notifying Buyer and affording Buyer an opportunity to examine and approve such facilities for compliance with procurement quality requirements.
6. Changing of Test Facility: Seller **shall** not change a test facility or use another test facility to meet specification/drawing requirements without prior Buyer's written approval, if a specific test facility was previously approved by Buyer as provided for in the procurement document.

7. Change of Management/Owner: Seller **shall** notify Buyer when a significant change in management or ownership has occurred.

B. RESPONSIBILITY FOR CONFORMANCE

1. Neither surveillance, inspection, and/or test made by Buyer or its representatives or US Government representatives at either Seller's or Buyer's facility, or Seller's compliance with all applicable procurement quality requirements, **shall** relieve Seller of the responsibility to furnish an item that conforms to the requirements of the procurement document.
2. Seller **shall** control sub-tier supplier procurements to the extent necessary to ensure quality requirements specified in the procurement document are satisfied.
3. Quality requirements **shall** include, but are not limited to, the following:
 - a. Sub-tier supplier pre-award survey/evaluations
 - b. Periodic auditing of supplier
 - c. Implementing a sub-tier supplier rating system
 - d. Ensuring adequate review of procurement documentation prior to procurements
 - e. Controlling procurement of critical items for Seller's product
 - f. Inspection of procured items to documented procedures
 - g. Control of non-conforming material, including corrective action

C. BUYER SURVEY, SURVEILLANCE, AUDITS AND INSPECTION

1. Buyer **shall** have the right to conduct surveys, audits, and surveillance of Seller facilities, and those of Seller's sub-tier suppliers with prior coordination with Seller, to determine capability to comply, and to verify continuing compliance, with the requirements of the procurement document.
2. Buyer **shall** have the right to perform an inspection at Seller's facilities and those of Seller's sub-tier supplier with prior coordination with Seller, during the period of manufacturing and inspection prior to shipment.
3. Final inspection and acceptance **shall** be performed at Buyer's facility, unless otherwise specified in the procurement document.

D. CORRECTIVE ACTION REQUEST

1. When a quality problem exists with Seller's items, Buyer **may** require Seller to complete a Corrective Action Request.
2. Responses to Corrective Action Requests **shall** be timely and **shall** include the following information:
 - a. Root cause of the deficiency
 - b. Action taken to correct the specific deficiency
 - c. Action taken to prevent recurrence of the deficiency
 - d. Action taken to determine if other products are affected
 - e. Effectivity date for implementation of identified corrective and preventive actions
 - f. Verification that the corrective and preventive actions are effective

E. U.S. GOVERNMENT SOURCE INSPECTION

For procurements made under U.S. Government contracts, the U.S. Government **shall** have the right to inspect any and all of the work included in the procurement document, at Seller's facilities or at sub-tier supplier's facilities. Seller quality control or inspection system and manufacturing processes are subject to review, verification, and analysis by authorized U.S. Government representatives.

F. MEASURING AND TEST EQUIPMENT

1. Seller **shall** be responsible for validating the accuracy and stability of tools, gages, and test equipment used to demonstrate that any item conforms to the requirements specified in the procurement document.
2. Documented schedules **shall** be maintained for periodic calibration to adequate standards.
3. Objective evidence of calibrations **shall** be recorded and made available for Buyer's review.

G. NONCONFORMING MATERIALS

1. Seller **shall** provide and maintain a corrective action and disposition program for non-conforming materials.
2. Seller **shall** provide for control, segregation, and identification of non-conforming materials detected at Seller's facilities.

3. Seller **shall** not have MRB disposition authority without Buyer's written authorization.
4. No repair **shall** be allowed outside of the specific specification limits unless prior written approval is obtained by Seller from Buyer.
5. RESERVED

H. INSPECTION RECORDS

1. Seller **shall** maintain records of all inspections and tests performed on any item delivered to Buyer.
2. Records **shall** identify any non-conformance and **shall** be made available for Buyer's review.
3. Seller and subcontractors **shall** ensure records are available for review by Customers and Regulatory Authorities in accordance with contract or regulatory requirements.

I. SAMPLE INSPECTION

1. Seller, prior to implementation of a sampling plan, **shall** receive written approval from Buyer.
2. Seller **may** use sample inspection plans, when tests are destructive, or when the records or inherent characteristics of the product indicate that a reduction in inspection/testing can be achieved without jeopardizing product quality.
3. Sample inspection **shall** be in accordance with the applicable Buyer specification. When not specified by Buyer, military standard sampling plans, e.g., from ANSI/ASQCZ1.4-11, MIL-STD-414, or handbooks H016, H017, and H018, **may** be used.
4. All sample inspection plans **shall** provide valid confidence in specified quality levels.

J. IDENTIFICATION

1. All materials **shall** be identified by a part number and revision, permanently and legibly affixed directly to the surface of each article,
2. In the event this is not possible due to physical size or nature of material, an identification tag **shall** be securely affixed to each article, or
3. If articles are supplied in individual or multi-unit containers the container **shall** reveal the appropriate identification.

K. PACKAGING, PRESERVATION, AND STORAGE

1. Seller **shall** incorporate good commercial practices for preservation and packaging of all articles that apply to this Purchase Order.
2. Seller **shall** identify each package permanently and legibly with Purchase Order number, manufacturer's name, date shipped, and packing sheet number.
3. Packaging **shall** be selected, to the extent necessary, to provide protection from physical and environmental damage during shipping and handling.
 - a. Cushioning materials **shall** be applied, as required, to protect and to restrict movement of items.
4. All materials which are volatile, toxic, or emit fumes, which are harmful to human health, **shall** be properly contained in accordance with applicable health and safety requirements.
 - a. Containers **shall** be plainly marked as to its contents with appropriate warnings, precautions, instructions, and storage conditions.
 - b. Material Safety Data Sheet (MSDS) **shall** be included with each shipment.

L. STORAGE AND SHELF LIFE

1. Seller **shall** identify materials and articles having definite characteristics of quality degradation or drift with age and/or the environment.
2. Identification **shall** indicate the date and/or cycle that the critical life was initiated and the date and/or cycle at which the useful life will be expended.
3. If environment is a factor in determining useful life, identification **shall** also include the storage temperature, humidity, etc., required to achieve the stated useful life.
4. In no case **shall** materials or articles be supplied to Buyer with less than 75% of its useful life or cycles remaining; however, Seller **shall** verify that sufficient operating life and environmental margin remains to meet the specified requirements of the procurement document.

M. RESERVED (SEE MSQ-34)

N. CERTIFICATE OF GOVERNMENT APPROVED QUALIFIED PARTS LIST (QPL) ITEMS

When the items supplied are required to be Qualified Parts List (QPL)/Qualified Manufacturers Line (QML) parts the following **shall** apply:

1. Seller **shall** submit a certification identifying that the manufacturer of the material described herein has been granted qualification by the Defense Supply Agency (DSA) in accordance with the applicable military specification.
2. The inclusion of products from the QPL **shall** not relieve the manufacturer of their responsibility for providing items, which meet all specification requirements, or for performing the qualification, inspections, and tests specified for such items.