

1.0 PURPOSE

This procedure applies both to the review and subsequent disposition of suspect/defective material purchased for or assembled in-house and to suspect/defective products returned for repair or evaluation.

To establish procedures and responsibilities for the identification, segregation, review, disposition and documentation for occurrences where materials, components, assemblies or completed product procured, processed or produced by the company and their subcontractors fails to meet the specified requirements including execution of corrective action, preventative action and continuous improvement.

2.0 POLICY

The company and all of its subcontractors shall establish and maintain an effective and positive system for controlling nonconforming material. QA/Engineering, Project Manager or designee shall review all occurrences where materials, components, assemblies or completed product fail to meet the specified requirements and he/she shall take appropriate action to prevent recurrence. QA/Engineering, Project Manager or designee shall notify senior management of all nonconformities found and corrective action taken as well as the cost impact of such non-conformance. Repair or rework of nonconforming material shall be in accordance with documented approved instructions as specified per Material Review Procedures.

3.0 RESPONSIBILITIES AND PROCEDURES

It is every employee's responsibility to identify nonconforming/suspect material as discrepant when it is noticed during normal work assignments.

The QA/Engineering Manager or designee analyzes product deficiencies to determine their cause and establishes and tracks a prioritized reduction plan for nonconforming/suspect material and product.

The QA/Engineering Manager or designee oversees the material review activities, and handles discrepant materials from incoming inspection and repair, and:

- Makes periodic sweeps of the production areas to remove any accumulation of discrepant material to the material hold area.
- When requested, responds to unique situations where unexpected nonconforming/suspect material threatens to disrupt production and assists in the segregation of this material.
- Determines if an audit of stock or staging areas is necessary to head off additional nonconforming/suspect material from reaching production areas. If audits are necessary, removes any additional nonconforming/suspect material to the material review area
- Dispositions material as to type of discrepancy. Returns minor non-conformities to production for rework. Discrepant vendor material is segregated on pallets or suitable containers. Scrap material is segregated from discrepant vendor material.

The Quality Representative, Project Manager or designee inspects incoming product for conformance and completes the QA Form QA 015A and QA 015B, Inspection Data Sheet.

The Quality Representative, Project Manager or designee evaluates customer returns and determines if the product is to be repaired.

The Quality Representative, Project Manager or designee ensures that nonconforming/suspect material does not accumulate in production areas, conducts or delegates authority for surveillance and purges, and notifies the responsible department if unexpected occurrences of nonconforming/suspect material are noticed.

The Quality Representative, Project Manager or designee obtains written customer authorization to use a product or process if it is different than a customer-approved product or process.

3.1 General Procedure

All personnel are responsible to immediately notify their supervisors, who in turn shall notify QA/Engineering, the Project Manager or designee, when materials, components, assemblies or completed product fail to meet the specified requirements during receiving, in-process or final inspection and testing.

Based on the nature and severity of the nonconformance, the QA/Engineering, the Project Manager or designee shall determine: if previous production lots should be re-inspected; if customers should be notified; if a recall is in order or if Material Review Board (MRB) action should be initiated per MRB procedure.

A nonconformance shall be defined as any item, part or product with one or more characteristics which departs from the specification, drawing or other approved product described requirement.

3.2 Identification of Discrepant Material

Upon receiving notification of a nonconformance occurrence, the QA/Engineering, the Project Manager or designee with the support of a QA representative or designee shall initiate an investigation process to determine appropriate course of action to be taken. The QA Representative or designee shall record the occurrence on the Quality Discrepancy Report (QDR) form QA 005 as prescribed in the QA manual and identify the suspected nonconforming items.

If the item can be return to print and/or contract requirements, the QA/Engineering Manager or designee or the Project Manager or designee dispositions the QDR to rework to print and re-inspects the defective material to close out the QDR as noted in section 3.0 of this QAP.

QA/Engineering Manager or designee or the Project Manager or designee, if required, shall issue a CAR form QA 001 as required per QAP 14.0.

All non-conforming material shall be conspicuously marked and moved to the MRB Hold area for further review and disposition by a Quality Representative.

A nonconformance shall be identified as minor when it does not adversely affect any of the following:

- a) health and safety;
- b) performance (Fit, Form or Function);
- c) interchangeability, reliability or maintainability;
- d) effective use or operation;
- e) weight or appearance (when a factor).

A nonconformance shall be identified as major or critical when it may affect any of the conditions specified above and critical when body or life may be affected by the defects noted above.

3.3 Segregation (MRB Hold Area)

The QA/Engineering, Project Manager or designee investigating the occurrence shall place a conspicuous quality hold tag on the suspected nonconforming items and place them in the MRB hold area immediately. Suspected items shall not be removed or used unless released in writing by the QA/Engineering, the Project Manager or designee after the appropriate disposition has been decided by the MRB and/or customer designee.

3.4 Review

The QA/Engineering, Project Manager or designee shall convene a MRB (or alternatively a review panel) consisting of Manufacturing, QA/Engineering, the Project Manager or designee to review the nonconformance occurrence as defined in the MRB procedure. If contractually required to do so, the Government or customer representative will be notified and asked to participate in the review and disposition process. Selection for participation on the MRB shall be based on technical qualifications and experience to review the nature of the nonconformance and disciplines required to make an acceptable disposition

3.4.1 Investigate

The QA/Engineering Manager or designee or Project Manager or designee inspects holding areas and classifies items in the holding area as follows:

Classification	Description
Critical	(i.e., affects safety or performance, can result in catastrophic outcome to body or life.)
Major	(i.e., unfit for sale, does not pass inspection and cannot be reworked to an acceptable condition. MRB action and/or customer input required.)
Minor	(i.e., can be reworked to print or an acceptable condition – May require customer action.)

For minor discrepancies that are detected during in-process inspection that are a result of workmanship defects, the shop order will be used by to return the item to manufacturing for rework.

For major nonconformance's detected during in-process inspection, the QA/Engineering Manager, Project Manager or designee shall record the defects and the facts involving the incident on a Quality Discrepancy Report (QDR) which is then forwarded to the QA/Engineering Manager, Project Manager or designee for action as note in MRB procedure.

The MRB shall submit its recommendation to QA/Engineering, the Project Manager or Customer/Supplier on whether the suspected items can be used as is or should be repaired, reworked or scrapped. Consideration shall be given to performance, safety and reliability as well as esthetics. The recommendations of the MRB and the decision of the QA/Engineering, Project Manager and Customer/Supplier shall be fully documented as noted in the MRB procedure.

3.5 Disposition

Implementation of the decision of the MRB shall be done as soon as possible. Material to be repaired or reworked shall be processed in accordance with authorized procedures and Government/customer approval. Nonconforming material received from suppliers shall be rejected and returned for corrective

action and coordinated via the Project Manager.

Disposition	Description
(i.e., Use As Is)	Parts are used exactly as they are with no anticipated effect on product quality.
(i.e., Not Usable)	Parts cannot be used in their present state. Scrap.
(i.e., Rework)	Parts are reworked and re-inspected.
(i.e., Hold for Evaluation)	Parts are awaiting customer authorization.
other	

Suspected item accepted "as is" and approved by the MRB shall be accompanied by authorized waivers/deviations if appropriate and as noted per MRB procedure WI-13.1.

Subject to approval by the MRB, nonconforming material may be repaired which is the subjection to an approved process designed to reduce but not completely eliminate the nonconformance. The approved purpose of repair is to bring the material into an acceptable condition.

Subject to approval by the MRB, nonconforming material may be reworked which is the processing of material to make it conform completely to the drawings, specifications or contract requirements.

If a nonconforming item cannot be economically reworked or repaired to an acceptable-usable condition and the dollar value and other criteria are consistent with company policy, it shall then be scrapped. QA/Engineering, the Project Manager or designee shall dispose of all scrap immediately and record the quantity and dollar value in the accounting on-line system as a permanent record.

3.6 Discrepant Material Disposition Procedures

3.6.1 Initial Review Procedure

Scrap items awaiting removal shall be positively marked and segregated to prevent use.

The QA/Engineering Manager, Project Manager or designee completes the QDR form QA 005 indicating the disposition and approves the rework planning sheet ME 001 or as defined in QAP 5.0, Document Control.

Rework shall be performed as agreed to by the MRB and as dispositioned.

If an item cannot be reworked, the following occurs:

The QA/Engineering Manager, Project Manager or designee identifies the responsible source internal or external upon receipt of defective parts.

The Project Manager or designee contacts the respective source and completes the QDR form QA 005. The QA/Engineering Manager, Project Manager or designee reviews the QDR and if required, initiates a CAR form QA 001 and forwards the CAR to the responsible contact representative for corrective action.

The QA/Engineering Manager, Project Manager or designee investigates nonconforming/suspect in-process materials and analysis:

- If QDR action is required
- If CAR action is required
- If MRB disposition/activity is required

The QA/Engineering Manager, Project Manager or designee will define if a customer deviation or waiver request is required to release nonconforming/suspect product. The project Manager or designee submits a request for deviation/waiver authorization via applicable customer required format.

The QA/Engineering Manager, Project Manager or designee maintains the QDR, CAR or Deviation/Waiver request, indicating the product notice for release, quantity authorized, and authorization expiration date, if applicable. All such records shall be stored online in the Master Job Folder.

3.6.2 Rework Procedure

If so dispositioned for rework, the QA/Engineering Manager, Project Manager or designee defines the rework and retesting requirements and completes the QDR form QA 005 and if required, the planning sheet form ME 001 or as required per the QAM and QAP 5.0.

The Project Manager or designee approves internal rework. The QA/Engineering Manager, Project Manager or designee approves external rework.

For external rework, the Project Manager or designee sends the applicable documentation to the supplier and coordinated the activity via purchasing.

For internal rework, the reworked material is moved to the appropriate rework area. The QA/Engineering Manager, Project Manager or designee and shop area lead coordinates the re-inspection activity of the reworked material and completes the QDR from QA 005 and documents the inspection results on the QA 015A or QA 015B inspection data sheet. If a CAR was issued, the QA/Engineering Manager, Project Manager or designee audits the CAR response for proper incorporation of preventive action and stores all appropriate documentation in the Master Job Folder online.

If the reworked product does not conform to requirements, the QA/Engineering Manager, Project Manager or designee notifies the customer and completes and submits the appropriate customer required forms for further processing. All appropriate documentation shall be archived in the Master Job Folder online.

3.6.3 Recall

If recommended, the QA/Engineering Manager, Project Manager or designee locates units to be recalled for reviewing. The QA/Engineering Manager, Project Manager or designee shall coordinate with the customers and suspect inventory to be checked and recalled when required. The QDR shall indicate the recall of finished parts with appropriate detailed information. The QA/Engineering Manager, Project Manager or designee is responsible for maintaining the records and coordinating all activity related to the recall including notification of Purchasing for cost of quality review.

If possible, finished product is reviewed in the field to determine whether to recall the product based on safety and customer satisfaction. The QA/Engineering Manager, Project Manager or designee performs the review and completes the QDR Form QA 005 for processing

3.6.4 Return Authorization

A customer can return product for evaluation and repair, if necessary, by contacting the QA/Engineering Manager, Project Manager or designee assigned to the contract for management.

The QA/Engineering Manager, Project Manager or designee or purchasing Manager may issues an authorization number for returns, but it is not required to have items returned. The customer may use their internal documentation as the return vehicle.

The Project Manager receives the returned item and enters the information onto the QDR form QA 005 to indicate the receipt of the product into the facility.

The QA/Engineering Manager, Project Manager or designee inspects the item to determine the problem, to verify the customer's complaint, and determine if the goods are acceptable for inventory. The QA/Engineering Manager, Project Manager or designee completes the QDR/RMA report on QA form 005.

The QA/Engineering Manager, Project Manager or designee dispositions returned item.

In cases where items have been returned in error, the Project Manager or designee notifies the customer of labor and material costs. If the product is not under warranty, a request to the customer to authorize payment for company expenditures will be submitted via purchasing, accounting or a designee.

The Project Manager or designee is responsible for coordinating the repair.

The Project Manager or designee creates the work orders for the repair and coordinates rework activity.

The Shop manager or designee, shell coordinate and document that the repair is performed and shell submit to quality control to make sure the reworked items are inspected prior to shipment.

A representative of the quality department inspects the item and completes and validates the QDR actions have been completed. The completed QDR is stored on-line in the QMS on-line system job master folder as a permanent record.

3.7 Documentation

The QA/Engineering Manager, Project Manager or designee shall maintain a record in the master job folder of all reports of suspected nonconformance and the QA/Engineering Manager, the Project Manager or designee shall collect and retain all QDR and MRB reports and documentation in the master job folder.

3.8 Prevention of Recurrence

Upon confirmation by the review process that suspected items are in fact nonconforming to the specified requirements, QA/Engineering, the Project Manager or designee shall initiate a Corrective Action Report (CAR) QA 001 procedure to isolate the root cause/probable cause of the problem and take appropriate action to prevent recurrence as noted in the MRB and CAR Work Instructions 13.1 when authorized.

4.0 PROCEDURE

4.1 Customer Authorization of Product or Process

When a product or process is different than what the customer approved, the QA Manager, Project Engineer or a Designee of like authority obtains written customer authorization prior to the product or process being used. The QA Manager, Project Engineer or a Designee of like authority reviews subcontractor requests for authorization and submits these requests to the customer for approval.

The authorization from the customer is maintained in the Master Job Folder by the QA Manager, Engineering Representative, Project Manager or their Designee of Authority for a minimum of 5-years or as specified per contract requirements. The QA Manager, Project Engineer or a Designee of like authority assures that product and process used after the authorization expires conforms to the current specifications.

Material shipped on an authorization is marked according to customer requirements by the QA Manager, Project Engineer or a Designee of like authority.

5.0 RELATED DOCUMENTS

- QAM
- QAP 3.0 Contract Review
- QAP 5.0 Document and Data Control
- QAP 6.0 Purchasing
- QAP 9.0 Process Control
- QAP 10.0 Inspection and Testing
- QAP 13.0 Control of Nonconforming Product
- QAP 14.0 Corrective and Preventive Action
- QAP 16.0 - Quality Records
- QAP 17.0 - Internal Quality Audits
- QAP 18.0 – Training
- QAP 19.0 Servicing
- QAP 21.0 Production Part Approval Process
- QAP 22.0 - Continuous Improvement
- WI-13.1 MRB Procedure/Process
- CAR form QA 001
- Internal Audit Report Form QA 002
- Quality Discrepancy Report (QDR) Form QA 005
- Contract Review Form QA 013
- QA Form QA 015A and QA 015B,
- Inspection Data Sheet
- Shop Order/Rework Planning Form ME001
- DoD Standard Form DD1694
- Customer Unique Engineering Change Notice/Order (ECN/ECO)
- ❖ NOTE: Additional Forms and Formats may be required dependent on customer required documentation and/or standardized contract requirements.
- ❖ NOTE: WI-13.1 only applies when customer authorizes the use of an Internal MRB Procedure. Otherwise, all QDR activity will be as authorized per contract.