

# SUBSAFE/LEVEL 1 Material Handling for Suppliers

## 1. PURPOSE

To document and control contractual and SUBSAFE/LEVEL 1 material handling requirements flowed down to Suppliers and subtier Suppliers.

## 2. SCOPE

This instruction is applicable to those internal clauses related to the SUBSAFE/LEVEL 1 material handling requirements that are published on purchase requisitions, purchase orders and on the Internet for Supplier access.

## 3. RESPONSIBILITIES

It is the responsibility of the Supplier to review the purchase requisition and determine if there is a requirement to obtain SUBSAFE/LEVEL 1 material. When imposed by CEPEDA Purchase Order (PO), the Supplier shall adhere to the requirements of this documents as referenced on the PO in addition to the applicable requirements of other CEPEDA documents and Quality Clauses (Q-Clause). If there is a conflict between the PO and the drawing, the Supplier shall contact the Buyer responsible for the PO.

It is the responsibility of the Supplier to obtain all measuring equipment and documents referenced herein in order to fully comply with the requirement of this document. CEPEDA shall not be held responsible to provide the supplier with any equipment or specifications unless otherwise specified on CEPEDA's PO.

It is the responsibility of the Supplier to conform to the requirements of CEPEDA's PO. If the Supplier is unable to attain the material required, it is the Supplier's responsibility to review the PO and CEPEDA Q-Clauses stated on the PO and contact CEPEDA Associates Quality Department.

It is the responsibility of CEPEDA to perform periodic verification of the Supplier's SUBSAFE/LEVEL 1 material handling process to ensure that it meets the requirements herein.

## 4. REFERENCES

- QCP300.2 – CEPEDA Supplier Quality Assurance Requirements (SQAR)
- CEPEDA Q-36 – Malpractice, Fraud & Falsification (MF&F)
- EB 2678 – Quality Control Requirements for Procured Materials
- MIL-STD-792 – Identification Marking Requirements
- NAVSEA 0948-LP-045-7010 – Material Control Standard

## 5. PROCESS

The Supplier shall adhere to the requirements of QCP300.2 referenced on CEPEDA Purchase Orders.

## 6. LEVEL 1 MATERIAL HANDLING

### 6.1. GENERAL REQUIREMENTS

- 6.1.1. The requirements listed for Level 1 material in conjunction with the requirements in the body of EB2678, MIL-I-45208, MIL-Q-9858, or one of the ISO Quality System Modules, as specified by the applicable contract or purchase order shall be adhered to. When there is a conflict in the Level 1 requirements (EB2678, MIL-I-45208, MIL-Q-9858, or one of the

ISO Quality System Modules) the more stringent Level 1 requirement listed on the Purchase Order shall take precedence.

- 6.1.2. The Supplier shall establish a SUBSAFE/LEVEL 1 procedure or multiple Level 1 procedures that will ensure all Objective Quality Evidence (OQE) requirements detailed in this document are met. Depending on the services provided these procedures may be incorporated into already existing procedures and do not need to be standalone documents. Procedures shall include but are not limited to the following:
- Material handling and segregation,
  - Positive marking per MIL-STD-792,
  - Traceability maintenance,
  - Nonconforming Material,
  - Verification of documentation (OQE),
  - Receipt inspection and sampling plan,
  - Final Inspection,
  - Adequate record retention,
  - Internal audits.
- 6.1.3. Designated SUBSAFE/LEVEL 1 Suppliers shall perform internal audits on each procedure and work process and maintain a training record of each employee that has been trained to meet the Supplier's Level 1 procedure requirements. Internal audits shall include an audit schedule, personnel assigned, frequency of the audit, and all documented evidence that the audit occurred.
- 6.1.4. SUBSAFE/LEVEL 1 material purchased for a Level 1 PO shall be obtained directly from the mill or a distributor with a mercury free statement if specified by the PO. The Supplier shall not upgrade non-level material to SUBSAFE/LEVEL 1 material under any circumstances.
- 6.1.4.1. Overcheck processes and over stamping cannot be used as a means for determining material properties in place of full traceability.
- 6.1.4.2. The Supplier cannot request a recertification for a different specification revision from another source other than the mill.
- 6.1.4.3. The unique traceability identification number shall not be changed unless the material properties are altered by either cold working or heat treating. See Section 6.4 for traceability requirements.
- 6.1.5. If the PO flows down CEPEDA QCP300.2 and CEPEDA Q-36 the Supplier is required to meet the following:
- Comply to the requirements cited in the applicable flowdown,
  - Seller shall include the following statement preprinted or otherwise permanently affixed on each manufacturing, inspection or test record used in conjunction with the subject subcontract:

***"Note: The recording of false, fictitious or fraudulent statements or entries on this document may be punishable as a felony under Federal Statute."***

## 6.2. LEVEL I MATERIAL CERTIFICATION DATA

- 6.2.1. Material certification test reports are required for **each** heat number of material. Material certification data shall include quantitative chemical (composition) and physical (mechanical property) required by specification and purchase order. Material certification test reports (MTRs) shall be traceable to the material through unique traceability codes marked on the material. The material traceability shall be maintained through all phases of fabrication and manufacturing.
- 6.2.2. The MTR shall include the following information about the material supplied, as applicable:
- Class
  - Form
  - Condition
  - Grade
  - Type
  - Finish
  - Composition
  - Full description
  - Name or symbol
  - Specification number and revision
  - Heat/lot number or other traceability information
- 6.2.3. Material certification data shall be recorded on the testing company's letterhead and bear the date, name (typed or printed), organizational title, and signature of the authorized representative of the company. Certification data supplied to CEPEDA Associates, Inc. shall be either the original mill material certification or the original material certification from the testing facility. Exact photocopies of certification data are acceptable.
- 6.2.4. Certification data must represent the finished product. Re-identification and recertification of material is required when the material is subjected to a process which alters its properties. If the starting material or raw stock is processed in a manner that will not affect its chemical composition or mechanical properties (e.g., machining), the original mill certification is acceptable. Recertification of the mechanical properties or chemical composition is required if a metal working or alloying process used during fabrication alters the original condition of the material. The mechanical properties or chemical composition of the material must be re-determined and be representative of the altered condition. The altered mechanical properties or chemical composition must be within the applicable specifications and be part of the certification data submitted to CEPEDA Associates, Inc. The altered material shall be uniquely re-identified with a **new** heat/lot number, marked, and traceable to the certification data.
- 6.2.5. In cases of foreign certification, translation or conversion of foreign language or units of measure into English or current US units of measure shall be annotated on the furnished foreign certification, space permitting, or placed on an addendum in the same format as the foreign certification data. Such translation or conversions shall be identified as to origin with name, title, signature, and date of the authorized representative of the company making the translation or conversion.

- 6.2.6. Transcription of data from the original mill test report, heat treatment or metal working facility certification, and/or testing laboratory test report to a supplier's form is **PROHIBITED**.
- 6.2.7. Statements on certification documents must be positive and unqualified. Words such as "to the best of our knowledge" or "we believe the information contained herein is true" are not acceptable.
- 6.2.8. Material certification data forwarded by the manufacturer shall contain a signed certification that the reported results represent the actual attributes of the material furnished and indicate full compliance with all applicable specification and purchase order requirements.
- 6.2.9. If material is received without the required certification papers or with incorrect/missing data on the certification papers, the material will be rejected.

### 6.3. MATERIAL HANDLING

- 6.3.1. SUBSAFE/LEVEL 1 material handling procedures shall provide adequate methods for controlling SUBSAFE/LEVEL 1 material from receipt through fabrication and shipment. The method of segregation shall ensure that similar appearing material of different alloys and/or material conditions, grades, or condition be segregated through physical separation.
- 6.3.2. Only individuals who are trained by the Supplier shall be allowed to handle SUBSAFE/LEVEL 1 material. Any SUBSAFE/LEVEL 1 material that is awaiting or in process for receipt inspection or is in storage shall be physically segregated from non-level 1 material to prevent comingling and unauthorized use. The Supplier may segregate their Level 1 material from non-level material using one or more of the following methods:
  - Cages,
  - Racks,
  - Bins,
  - Shelves,
  - Boxes,
  - Roped-off areas,
  - Locked/bonded rooms.

SUBSAFE/LEVEL 1 designated cages, racks, shelves, etc. shall be clearly identifiable for SUBSAFE/LEVEL 1 raw material and/or parts only. The Supplier shall limit the number of employees who are allowed access to SUBSAFE/LEVEL 1 material to ensure proper material handling at all times.

- 6.3.3. Staging of Level 1 material with other materials is acceptable for a specific job or fabrication process, provided the Level 1 material is clearly marked as required and the material for the specific job or fabrication process is grouped together, identified by the job or process number, and segregated from material grouped for other processes or jobs.

- 6.3.4. The following provisions shall be made for Level 1 weld wire.
- a) A separate cabinet shall be maintained for Level 1 weld wire.
  - b) Cabinets containing Level 1 weld wire must be marked "Level 1" if it is stored in a Level 1 cabinet.
  - c) The weld wire cabinet must be solid on all sides.
  - d) Each tube/container must be marked "Level 1" if it is stored in a Level 1 cabinet.
  - e) Weld wire cabinets are to be locked.
  - f) Welders must not have the key to the cabinet.
  - g) Usable weld wire must be returned to locked cabinet nightly.
  - h) Scrap short pieces/ stubs of weld wire must be disposed of in a way that they cannot be retrieved and used.

#### 6.4. MARKING REQUIREMENTS

- 6.4.1. SUBSAFE/LEVEL 1 material and/or parts shall be marked in accordance with MIL-STD-792. Identification marking shall consist of letters, numbers, and/or symbols intentionally added to metal surfaces. Any marking performed on SUBSAFE/LEVEL 1 material and/or parts shall be permanent, not easily removable, and needs to remain integral with the material or finished part.
- 6.4.2. The traceability marking shall consist of raw material heat number and a heat treat lot number (if applicable) or a unique trace code number that provides, through documentation, traceability back to the raw material heat number and heat treat lot number (when applicable). In all cases, the traceability marking utilized shall be unique in that given only the traceability marking, the Supplier shall be able to provide all Objective Quality Evidence associated with the processing of that item, including heat treat.
- 6.4.3. Raw material shall be marked in accordance with MIL-STD-792 Types I, II, III, V, VII, or VIII. If the finished parts are too small to positively mark the parts, the Supplier may Bag & Tag the parts with the required traceability information.
- 6.4.4. Any positive marking that may be removed during a manufacturing, fabrication, or maintenance process shall be recorded prior to removal and immediately restored upon completion of the process. The use of Bag & Tag is required if the parts are too small to physically restore the marking.

#### 6.5. TRACEABILITY

- 6.5.1. The supplier is required to maintain absolute traceability on all SUBSAFE/LEVEL I material and finished product supplied on this purchase order. The traceability extends from cradle to grave, beginning with the procurement of raw material and extending through machining, storage, special processes, sub-tier contract processing, etc., and subsequent shipment of material to CEPEDA Associates, Inc.
- 6.5.2. Level 1 material and part traceability shall be maintained from the mill up to shipment and installation. The Supplier shall establish a means of maintaining traceability detailed in the appropriate SUBSAFE/LEVEL 1 procedure(s). All SUBSAFE/LEVEL 1 material shall be correctly identified and marked using a unique traceability method that correlates the material to the PO or job/work order.
- 6.5.3. All SUBSAFE/LEVEL I raw material and finished product shall be permanently and legibly marked with the applicable unique traceability number (e.g., heat number, heat code,

laboratory test report number, etc.) Acceptable methods of marking are engraving, electro-, or vibro-etching. The unique identification number shall appear on all pertinent documents.

When the traceability number is machined or otherwise removed from raw material during a manufacturing process, the remaining portion of the material shall immediately be permanently and legibly marked as above with the traceability number. When the traceability number is removed and/or it is not practical to maintain the traceability number on the material (e.g., during the machining process), identification tags for each part with the traceability number and other pertinent data shall be attached and flow with the material through the applicable processes. The identification tag shall be apart from the individual part (only one (1) part at a time) only during the performance of an operation as required. The material shall be re-marked/identified per applicable specifications as soon as possible.

- 6.5.4. During a process or series of processes, traceability may be maintained by methods such as bagging or tagging using a wired or lanyard tag. The Supplier may use segregated boxes during these processes to ensure that SUBSAFE/LEVEL 1 parts are not comingled with non-level parts.
- 6.5.5. When the mechanical properties are altered through heat treating or cold working, a new unique traceability number shall be issued to the material which corresponds to its original traceability number. This new traceability number shall be provided from the Supplier to the outside processor or vice versa. The original certification data report shall be over stamped and/or annotated to contain the following information:

Traceability Number _____	(marking on finished item)
Is fabricated from raw material identified to	
Heat number _____	And heat treat number _____
	(when applicable)
_____	
(name and signature of authorized company representative)	(date)

- 6.5.6. The certification report from the outside processor shall certify with the new traceability number.

When material is worked resulting in changes to its mechanical properties, the mechanical properties shall be re-determined by a third-party verification test.

- 6.5.7. Supplier documentation shall accurately certify compliance with the specification requirements for chemical composition and mechanical properties. Job/work orders or similar work authorizing documentation involving SUBSAFE/LEVEL 1 materials or parts shall be stamped or labeled "SUBSAFE/LEVEL 1" in legible letters and of sufficient font size to be easily distinguishable. All documentation for each SUBSAFE/LEVEL 1 job shall be identified with a unique traceability recorded on each page and the material or part(s) shall be marked with the same unique traceability to correlate the two.

- 6.5.8. The supplier shall inspect all characteristics (100%) of the completed parts in accordance with the applicable drawings, specifications, etc. and record the actual measurements as applicable. Features such as threaded diameters may be checked with Go/No-Go gages and designated "ACCEPT," unless otherwise specified in the purchase order. All inspected parts shall be identified and traceable to the applicable inspection report, material certification, etc. via the unique traceability number, part number/revision, heat number, purchase order number, etc. A copy of the applicable inspection report shall be provided with each part shipped to CEPEDA Associates, Inc. and signed by an authorized company representative.
- 6.5.9. If material is received without the required certification papers or with incorrect/missing data on the certification papers, the material will be rejected. Any SUBSAFE/LEVEL 1 material or parts that have lost traceability at any point during its manufacturing shall be segregated and dispositioned as directed in Section 6.2.
- 6.5.10. In all cases, the accompanying paperwork (route sheet, traveler, etc.) shall indicate the proper traceability code and shall be identified "Level 1" in letters that are eligible and of sufficient size to be easily recognized. This paperwork shall also provide accountability throughout the manufacturing process (i.e., number of pieces cut, rejected, scrapped, tested, etc.)

## **6.6. NONCONFORMING MATERIAL**

- 6.6.1. When SUBSAFE/LEVEL 1 material is found to be incorrectly marked, tagged, does not comply with the Level 1 requirements in this document, or the applicable specifications or drawings, the material shall be placed in a hold or reject status and clearly identified until the material is properly dispositioned. Nonconforming SUBSAFE/LEVEL 1 material shall be clearly and positively marked as "Scrap" or "Nonconforming" and placed in a bonded area that has limited access to employees.
- 6.6.2. Items where the traceability marking is lost shall be considered nonconforming material until appropriate tests have been performed that can absolutely identify the heat from which the item was produced. This requirement is not applicable to items that are uniquely identifiable by their size, configuration, and uniqueness of material.
- 6.6.3. The method of re-establishing traceability shall be approved by CEPEDA for each incident where traceability is lost.

## **6.7. VERIFICATION OF OBJECTIVE QUALITY EVIDENCE (OQE)**

- 6.7.1. Objective Quality Evidence (OQE) refers to quantitative and qualitative data of all mechanical, chemical, and performance tests conducted (as required by the specification, drawing, and/or PO) to prove that the purchased material conforms to specified requirements.
- 6.7.2. When generic alloy identity testing is specifically required by the purchase order or invoked specifications, the selected sample of parts shall be verified by a suitable nondestructive test to assure that material being provided or installed is of the specified metallurgical group. This test shall be performed by the first-tier supplier or the supplier who assembles the finished product in accordance with a procedure that is approved by the purchaser.

- 6.7.3. Material certification data sheets shall be recorded on the testing sub-tier Supplier's letterhead and shall have a clearly printed name, title, and signature of the authorized testing sub-tier Supplier's representative. Transcription of data from the original mill test report, heat treatment or metal working facility certification, and/or testing laboratory test report to a supplier's form is PROHIBITED.
- 6.7.4. In instances of foreign certification, conversion of foreign language units of measure into U.S. units of measure shall be annotated on the provided foreign certifications (if space permits) or placed on an addendum in the same format. Any conversions shall be identified as to origin with clearly printed name, title, and signature of the authorized representative to the Supplier making the conversion. The Supplier shall refer to the applicable DFAR clauses in the Terms and Conditions of the PO.
- 6.7.5. All records that are related to a SUBSAFE/LEVEL 1 PO shall be retained for a minimum of 7 years or as required by CEPEDA'S PO.

## **6.8. FINAL INSPECTION REQUIREMENTS**

The Supplier shall perform 100% visual inspection and 100% workmanship inspection for all finished SUBSAFE/LEVEL 1 parts prior to shipment. Inspection shall be performed in accordance with material specifications or part specific specifications.

## **6.9. RECORD RETENTION**

- 6.9.1. All test and inspection records including radiographs, furnace charts of heat treatment (unless otherwise noted in the purchase order), radiographic records, and reports of nonconformances, applicable to material supplied to the purchaser shall be retained by the supplier. These records shall include verification that all required inspections and tests have been accomplished with satisfactory results by a qualified individual.
- 6.9.2. Test records shall be retained for a period of seven years after completion of the last item of the contract.
- 6.9.3. Where work is performed under continuing contracts or on other than a contractual basis, these records shall be retained for seven years from the date the work was performed.
- 6.9.4. Records shall be made available to the purchaser within 36 hours upon request. When requested, the supplier shall provide objective quality evidence that the item, material, or service used in the performance of this order is in full compliance with the appropriate specifications and indicated revisions.

## **7.0. AUDITS**

- 7.0.1. The supplier shall establish and maintain an internal quality audit program. It is recommended that the supplier also maintain and establish an external (sub-tier) review and quality audit program. These programs shall be designed and implemented to determine compliance to purchase order requirements.
- 7.0.2. Both internal and external audits will be preplanned using a checklist of audit elements that can determine if contract requirements can or are being satisfied. An audit report will document the level of compliance found during the audit.



Nonconformance will be clearly documented on a Corrective Action Report with required follow-up actions sufficient to determine satisfactory resolution. Records of audits and corrective and preventive actions shall be maintained by the Supplier and made available for review by the Purchaser upon request.

- 7.0.3. The supplier shall audit their internal quality assurance program and the internal manufacture and/or process system on a frequency set by company policy to determine compliance to their quality program and the requirements established by this specification.