

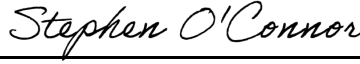


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Quality Verification Document Requirement Preparation Guide

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Revision 0

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1.0 Purpose

This document provides guidance to suppliers preparing and submitting Quality Verification Document Requirement (QVDR) packages to SRMC, when required by a SRMC Purchase Order (PO).

The QVDR is the Quality Record for components and services. QVDR package assembly and presentation is a representation of the Supplier's dedication to quality services and attention to PO requirements. Thorough understanding and use of this guide by each supplier and sub-tier supplier; in parallel with compliance to related SRMC contract requirements, will significantly improve the likelihood that acceptable quality verification documents will be delivered on time, the first time.

2.0 Scope

This guide is applicable to SRMC project suppliers and is intended for supplier use only.

This guide is applicable to the preparation, completion, and delivery of quality verification documents, when required by SRMC contract. QVDRs are defined in each SRMC contract utilizing Form OSR 45-5, *Quality Verification Documentation Requirements*.

3.0 Definitions

3.1 Quality Verification Documents Requirements (QVDR): SRMC controlled form OSR 45-5 (Attachment 4) which lists the SRMC PO required Supplier documentation to be provided for shipment authorization and acceptance.

3.2 Quality Verification Documents: Deliverable supplier documents in which an "independent" reviewer (e.g. Receiving Inspection, Source Surveillance Representative, etc.) verifies the item or service meets the procurement requirements. Examples include Certified Material Test Reports (CMTRs), welding verification reports, welder qualification records, dimensional inspection reports, load test reports, etc.

3.3 Supplier: any individual or organization who furnishes items or services in accordance with an SRMC PO. All-inclusive term used in place of the following: vendor, seller, subcontractor, dealer, fabricator, consultant, manufacturer, distributor, and sub-tier supplier that are material or service providers.

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- 3.4** Supplier Surveillance Representative (SSR): SRMC Supply Chain Quality Assurance representative assigned (when required) to perform Supplier/Sub-Supplier/Vendor oversight activities during in-process operations for SRMC PO requirement compliance.

4.0 Responsibilities

Each supplier is responsible and accountable for the timely preparation, assembly, organization, review, and delivery of acceptable quality verification documents. This responsibility extends to all quality verification documents originated by sub-tier suppliers, at any tier.

The initial determination of document package acceptability on behalf of SRMC is the SRMC representative.

Final review, evaluation, and acceptance of each document package is performed upon receipt at Savannah River Site of the procured material, equipment, or services.

5.0 Guidance

5.1 General

The delivery of timely and acceptable quality verification documents with each shipment of procured material and/or equipment is both a PO requirement and an expectation of SRMC.

Quality verification documentation is no less important or less critical than the actual material, equipment, or service procured. Equal attention and commitment, by the supplier, to both is required.

Document packages shall be high quality in appearance. Document packages may be manual paper, electronically scanned, and electronic versions. All versions of the QVDR package shall be formatted consistently and controlled in accordance with procedures and PO requirements. Electronic format of the QVDR package should be agreed upon early in the project.

Prime suppliers assume absolute responsibility and accountability for documentation generated by their sub-tier suppliers, at any tier.

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Without acceptable quality verification documents, acceptance of the procured material, equipment, or service will be delayed. Delays in this form, may adversely impact SRMC project schedules and will generally require SRMC to incur additional costs.

SRMC may respond to delays by any remedy available under the terms of the PO, up to and including back charge.

Attachment 1, Quality Verification Document Requirement Success Factors. The attachment identifies key success factors and will contribute to the success of preparing an acceptable document package.

Attachment 2, Quality Verification Document Requirement Attributes. The attachment identifies common attributes of an acceptable quality verification document package

5.2 Package Contents

To the extent possible, documentation should be prepared/presented using current electronic technology for text, print, and/or graphics production. Manual corrections to hardcopy documents should be minimal.

The QVDR package shall contain all the documents listed in OSR 45-5 in the order listed. Document packages shall include only the required and mandatory documents/information, as defined by form OSR 45-5. Do not include documentation or other information that is not specifically required. Inclusion of non-mandatory documents and/or information will cause unnecessary questions and/or contribute to confusion, irrespective of intent.

Each document and all required information shall comply with the established technical and/or reviewed submittal requirements, as designated in the PO. Document content must be verified as a minimum, against the specification paragraph stated in Column 2 of Form OSR 45-5.

Each document package shall be assembled using an organized and logical approach. When the PO or logistics require multiple shipments and components are shipped separately and each component is to be Receipt Inspected by SRR separately; each component must be shipped with its own QVDR package. The supplier should develop a QVDR package strategy early in the planning process to be prepared for and ensuring that all

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required information is included with each shipment to avoid SRMC Receipt Inspection rejection and delayed payments.

When multiple document packages are submitted, the approach must be consistent between each package.

The completed documentation package will be evaluated by independent reviewers, this individual will have little or no knowledge of the supplier's methods, techniques, or manufacturing processes. To the extent possible, the package should be developed using an approach that will require no further explanation or interpretation.

5.3 Document Legibility

Each document, including the OSR 45-5 Form (QVDR) cover, shall be legible and reproducible. Documents with substandard legibility or documents that can no longer be reproduced without substantial degradation to legibility are not acceptable when the issue/concern applies to required technical data or information.

Each document and each entry on each document must be complete. Blank spaces or incomplete entries are not acceptable. Any unused blocks shall be marked "N/A" with an explanation.

Changes made by manual correction should be avoided. If unavoidable; corrections to errors and/or omissions shall be clear as to what changed, who initiated the change, and when the change occurred. This type of correction is made using the One-Line -Initial & Date/single-strike through method. A single-strike through with the initials of the initiator and date of the change noted immediately adjacent to the change.

***NOTE:** Whiteout or similar type products are specifically prohibited and will not be accepted.*

5.4 Completing OSR Form 45-5 (QVDR)

The OSR 45-5 form must be completed in strict accordance with the instructions provided by this guide. Read the instructions carefully and completely.

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The latest version of the OSR 45-5 form is established by the PO and becomes the cover (index page) of the quality verification document package. Unless otherwise directed, the form may be completed electronically (if provided to the supplier electronically) or may be completed exclusively in hard copy.

NOTE: If completed electronically, the OSR 45-5 format shall not be altered, revised, or modified in any way exclusive of the mandatory entries required. Electronically altered, revised, or modified forms will be rejected.

The supplier is responsible for accurately recording Remarks, DOC Supplier Page Count, Supplier's Order No., Supplier's Part, Supplier's Part Name, Quantity, PO No., SRS Line/Equip Tag or Code No., and SRS Part Name. Once these entries have been completed, an authorized supplier representative shall complete the Supplier's Conformance Statement portion of OSR 45-5.

NOTE: Attachment 4, OSR Form (45-5), Quality Verification Document Requirements, has these locations highlighted.

DOC Supplier Page-Count, defines the page count for each individual document type, and for the QVDR Package. Each page shall be consecutively numbered and will be used to determine if the package is complete when received. It is recommended that each section be individually paginated and the QVDR package, as a whole, be paginated. Each OSR 45-5 block/column must contain a legible and accurate entry, even if the page count is zero.

*NOTE: It is the Supplier's responsibility to review and provide an accurate QVDR package. The SSR shall verify the page count prior to signing the release. It is highly encouraged to verify and re-verify the page count to avoid problems during SRR receipt inspection. It is also recommended that each section be individually paginated and the QVDR package, as a whole, be paginated. (e.g. Doc Cat 17.1 pg 1 of n **and** QVDR pg 1 of n)*

5.5 SRMC Review

When an SSR reviews the package, they will progressively review QVDR documents during in-process verification activities. This requires the

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supplier to provide QVDR documents to the SSR, as activities are completed. As these documents are reviewed and found acceptable the SSR will initial, date and/or stamp, signifying acceptance. This will allow the supplier to start building the QVDR package assuring that the final review can be done efficiently and without significant difficulty.

NOTE: The SSR is not authorized to participate in the preparation of document packages. This is a supplier responsibility. The SSR may however be requested to clarify guidance requirements and to provide interpretative recommendations.

Attachment 3, Quality Verification Document Requirement Review Checklist. Document packages that meet the checklist attributes are generally found to be acceptable to the SSR.

“**Release to Ship**” authorization (when required by the PO) for material or equipment to be released is dependent upon satisfactory review of the QVDR package by the SSR. This is indicated by the SSR signature on Form OSR 45-5.

5.6 Document Package Submittal

Upon obtaining the authorized SSR signature (when required), preparations shall be made for submitting the completed document package, as instructed by Form OSR 45-5.

Diligence is required when reproducing the completed package prior to submittal. SSR signed packages that have been reproduced in any way must be re-verified by the supplier to assure that

- (1) the document package remains accurate and complete
- (2) the package page count is correct
- (3) no degradation in legibility has occurred

The obligation to deliver an acceptable document package to the shipping destination remains with the supplier.

6.0 Attachments

Attachment 1 - QVDR Success Factors

Attachment 2 - QVRD Attributes

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Attachment 3 – QVDR Review Checklist

Attachment 4 - OSR Form 45-5, QVDR Form

Attachment 5 - OSR Form 45-5, QVDR Form Instructions

Quality Verification Document Requirements Success Factors

ATTACHMENT 1

The items listed below provide practical insights on improving the successful development and completion of QVDR packages. Experience has shown that when these success factors are given the appropriate level of attention, they can provide a road map to producing and delivering an acceptable QVDR package.

Early Planning / Early Start

Plan for success. Initiate document package preparation activities early in the performance period. Prioritize preparation of the document package. Avoid late starts.

Assigned Accountability / Sufficient Resources Available

Delegate responsibility and authority for document package preparation early. Provide a clear management commitment to necessary staffing and other required resources for the duration of the performance period.

Early Evaluation and Understanding of Documentation Requirements

Thoroughly investigate, evaluate, understand, and flow-down the document requirements. Do not assume everyone understands requirements. Stress the importance of legibility and correction process. Obtain any clarification from SRR early.

Recognition of OSR 45-5 Form Revisions / No Form Format Modifications or Alterations

Verify that the cover sheet to the documentation package is the correct revision as established by the Purchase Order. If completing electronically, do not alter, revise, or modify the form in any way. Forms modified in any way will be rejected.

Clear, Well Defined, and Documented Preparation Process

Establish and document a package preparation procedure and follow it. Assure that the assigned responsibilities are clear, accountabilities are established, and that when implemented, an acceptable documentation package will result. Routinely assess/monitor the process.

Package Developed in Parallel with Production Activity

Initiate preparation and assembly of the documentation package prior to and during execution of the work. Do not wait or delay; start early.

SRMC SSR Early Engagement

Communicate early with the SRMC SSR, when assigned, regarding documentation package status. Avoid surprises or last-minute starts. Do not rely on the SSR to assist in preparing the document package. This is solely a supplier responsibility.

Attention to Detail / Continuous Progress Monitoring

Each page must be critically examined for accuracy, completeness, and legibility. Periodic in-process reviews will ensure that this standard is initially met and maintained throughout the performance period.

Quality Verification Document Requirements Success Factors

ATTACHMENT 1

Effective Internal Document Review

Each page of each package must be verified and re-verified by the supplier. Do not request review by the SRR SSR of any document that has not been validated as accurate, complete, and legible by the supplier document package preparation system.

Repetitive presentation of inadequate documentation to the SRMC SSR will result in issuance of a Supplier Deviation Notification Report (SDNR) indicating that the supplier process controls are inadequate. The result of this action will likely cause additional delays, directly attributable to the supplier.

Quality Verification Document Requirements Attributes

ATTACHMENT 2

The items below are common attributes of an acceptable QVDR package. Documentation packages reflecting these attributes will likely be accepted with little or no rework required.

- Information and Data Complies with Technical Requirements
- Information Compiled and Presented for Ease of Review
 - All pages are consistent in orientation. (i.e. scanned and assembled in proper top/bottom and left/right orientation)
- Accurate in Every Respect (Zero Defects)
- Well Organized, Logically Sequenced as listed on the QVDR
- Adequate Content, Sufficient Detail, and Clear Traceability
- Correct and Clear Document Identification
- Complete (Every Entry / Every Page)
- Legible and Reproducible
- Accurate Page Numbering, Marking, and Count
 - It is recommended that each section be individually paginated and the QVDR package, as a whole, be paginated. (e.g. *Doc Cat 17.1 pg 1 of n* and *QVDR pg 1 of n*)

Quality Verification Document Requirements Review Checklist

ATTACHMENT 3

The list of items below is used by the SRMC representative to evaluate QVDR packages for acceptance during fabrication activities and prior to shipment.

Form 45-5, *Quality Verification Document Requirements*

Prior to acceptance, the completed Form OSR 45-5 meets the following:

- OSR Form 45-5 revision, content, and appearance match the PO version; alterations are not permitted
- OSR Form 45-5 Supplier Required entries are complete, accurate and legible
- OSR Form 45-5 is signed/dated by an authorized supplier representative

Quality Verification Document Package

Prior to acceptance the contents of the documentation package meet the following:

- Documentation Package is organized, orderly, and logically assembled
- Documentation Package contains only required documentation
- Document Category is identified on each page, as defined by OSR-45-5
- Page/Sheet identification including document category, is clear, correct, and not obscured
- Required technical information is legible and reproducible*
- Documents comply with supplier procedures or instructions, to the extent applicable
- Required technical information complies with Specification Paragraph Referenced, as defined by Form OSR 45-5
- Page count is accurate and matches Form OSR 45-5
 - It is recommended that each section be individually paginated and the QVDR package, as a whole, be paginated. (e.g. *Doc Cat 17.1 pg 1 of n and QVDR pg 1 of n*)
- Each page/sheet and each entry is complete, no blank or partially complete entries
- Each page/sheet is traceable to the material, process, or activity, as applicable
- Corrections are made using single line-through technique and individually initialed and dated, no white-out
- Listed dates are accurate and reflect the actual sequence of events, to the extent known or observed
- Signatures are affixed and accurately dated, by authorized personnel

For Material Test Reports Specifically:

- Manufacturer name and Location are identified as required by material specification
- Report complies with applicable material specification(s)
- Heat Numbers are traceable to the material, to the extent required
- Material is correctly identified and includes as applicable, material specification, type, grade, addenda, and size
- Chemical and/or physical test results are within required material specification limits
- Heat treatment information is identified as applicable, to include, time, temperature, and cooling process
- Results of specified supplemental requirements are identified, including as applicable, NDE, Proof Load Tests, Hydrostatic tests, Charpy Impact tests, Hardness tests, Delta Ferrite

Quality Verification Document Requirements Review Checklist

ATTACHMENT 3

Content, Diffusible Hydrogen Content etc.

The SRMC representative performs the following upon satisfactory review of the complete documentation package prior to shipment:

- Initial all document entries on OSR 45-5 Form (even if page count is Zero)
- Complete Source Surveillance Representative at Suppliers Facility portion of OSR 45-5 Form, sign and date
- Confirm One (1) complete and approved package is included by the supplier with each shipment, as applicable

** Documents with substandard legibility or documents that can no longer be reproduced without substantial degradation to legibility are not acceptable when the legibility concern applies to required technical data or information*

Attachment No.
Revision No.
PRD No.

Quality Verification Document Requirements (QVDR)

Instructions

Proc. Ref. 3E, 1.6

Purpose The Quality Verification Document Requirements (QVDR) is initiated by SRS and completed by the Supplier when providing quality verification documents. The QVDR is a multipurpose form to:

- Transmit quality verification documents from the Supplier
- Provide evidence of SSR release of documentation and/or work (when required)
- Provide evidence of an SRS inspection check of documentation received at SRS.

SRS Entries		Supplier Entries	
Entry No.	Information Required	Entry No.	Information Required
1	Enter the Document Category Number (see below).	7	Enter number of pages of quality verification document being submitted
2	Enter Procurement Requirements Document (PRD) and Paragraph Reference.	8, 9, 10	Enter information required.
3	Enter Description corresponding to Document Category Number.	11	Enter the quantity of units covered by the documents submitted. For each lot on Entry No. 12 being released, provide a separate copy of this completed form and the supporting quality verification Documents.
4	When documentation review is required by a purchase order to release work, SSR to initial upon item release.	12, 13, 14	Enter information required.
6	Enter Remarks as appropriate.	15	Supplier-Signature of an employee authorized to sign such documents.
16	SSR prints, signs, and dates release.		
Field Entries			
Entry No.	Information Required		
5	SRS inspector at the jobsite to complete check-in.		
17	The SRS Inspector will review the quality verification documentation package. If found satisfactory, he signs and dates the check-in statement		

Document Category Numbers and Descriptions

12.0	Welding Verification Reports - Reports of welding performed to include weld identification and certification that qualified welding procedures and welders were used.
13.0	Material Verification Reports - Reports relative to material which confirm, substantiate, or assure that an activity or condition has been implemented in conformance with code and material specifications imposed by the procurement documents.
14.0	Major Repair Verification Reports - Reports may include weld repair locations (maps), material test reports for filler metal, pre- and post-weld heat treatment records, NDE records, etc. The resolution of whether a repair is major or not is an SRS responsibility.
15.0	Cleaning and Coating Verification Reports - Reports include a certification of visual examination for surface preparation, surface profile, materials, etc. and also humidity data, temperature data, and coating thickness data as required by the procurement documents.
16.0	Heat Treat Reports - Reports normally include furnace charts and similar records and certify the item(s) treated, the procedure used, furnace atmosphere, time at temperature, cooling rate, etc.
17.0	Material Property Reports <ul style="list-style-type: none"> 17.1 MTR (Material Test Reports)- These reports include all chemical, physical, mechanical, and electrical property test data required by the material specification and applicable codes. These are applicable to cement, concrete, metals, cable jacket materials, rebar splices, etc. 17.2 Impact Test Data - Reports of Charpy or drop weight tests including specimen configuration, test temperature, and fracture data. 17.3 Ferrite Data - Reports of the ferrite percentage for stainless steel materials used, including castings and welding filler metals as deposited. 17.4 Material Certificate of Conformance - Documents which certify conformance to the requirements of the applicable material specification. 17.5 Electrical Property Reports - Reports of electrical characteristics, e.g., dielectric, impedance, resistance, flame tests, corona, etc.
18.0	Code Compliance - Verifying documents (such as data Forms U-1, M-2, State, etc.), which are prepared by the manufacturer or installer and certified by the Authorized Code Inspector.
19.0	UT - Ultrasonic Examination and Verification Reports - Examination results of certain characteristics of discontinuities and inclusions in material by the use of high frequency acoustic energy.
20.0	RT - Radiographic Examination and Verification Reports - Examination results of certain characteristics of discontinuities and inclusions in material by x-ray or gamma-ray exposure of photogenic film, including film itself.
21.0	MT - Magnetic Particle Examination and Verification Reports - Examination results of surface (or near surface) discontinuities in magnetic materials by distortion of an applied magnetic field.
22.0	PT - Liquid Penetrant Examination and Verification Reports - Examination results of surface discontinuities in materials by application of a penetrating liquid in conjunction with suitable developing techniques.
23.0	Eddy Current Examination and Verification Reports - Examination results of discontinuities in material by distortion of an applied electromagnetic field.
24.0	Pressure Test - Hydro Air, Leak, Bubble, or Vacuum Test and Verification Reports - Results of hydrostatic or pneumatic structural integrity and leakage tests.
25.0	Inspection and Verification Reports- Documented findings resulting from an inspection.
26.0	Performance Test and Verification Reports - Reports of Test Results <ul style="list-style-type: none"> 26.1 Mechanical Test, e.g., pump, performance data, valve stroking, load, temperature rise, calibration, environment, etc. 26.2 Electrical Tests, e.g., load, impulse, overload, continuity, voltage, temperature rise, calibration, saturation, loss, etc.
27.0	Prototype Test Report - Report of the test which is performed on a standard or typical example of equipment, material, or item, and which is not required for each item produced in order to substantiate the acceptability of equal items. This normally includes tests which may, or could be expected to, result in damage to the item(s) tested.
28.0	Certificate of Conformance -A document signed or otherwise authenticated by an authorized individual certifying the degree to which items or services meet specified requirements.