DEPARTMENT OF DEFENSE
Defense Contract Management Agency

INSTRUCTION

Process Review - QA

Quality Assurance Directorate **DCMA-INST 311**
OPR: DCMA-QA **July 31, 2013**
Validated Current with Administrative Changes, August 5, 2014

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1. PURPOSE. This Instruction:

a. ~~Reissues and u~~*U*pdates DCMA Instruction (DCMA-INST 311), "Process Review - QA" (Reference (a)).

b. Establishes ~~updated~~ policy, assigns roles and responsibilities for activities performing Process Reviews (PRs) which will enable Quality Assurance (QA) personnel to determine the suitability, adequacy, effectiveness and consistency of the supplier's processes to meet contractual requirements and to provide a basis of confidence for product/service acceptance.

c. Is established in accordance with (IAW) DoD Directive 5105.64 (Reference (b)), DCMA-INST 501, "Policy ***Publications*** Program" (Reference (c)), and all references listed.

2. APPLICABILITY. This Instruction applies to all DCMA activities performing supplier inspections.

3. MANAGERS' INTERNAL CONTROL PROGRAM. This Instruction is subject to evaluation and testing IAW DCMA-INST 710, "Managers' Internal Control Program" (Reference (d)). The process flowchart ~~is located at Appendix A~~ ***and key controls of identified process risk are located on the policy resource Web page for this Instruction***.

4. RELEASABILITY – UNLIMITED. This Instruction is approved for public release.

5. PLAS CODE. Process 085C - SQA-Surveillance-Risk Handling Methods.

6. POLICY RESOURCE WEB PAGE. https://home.dcma.mil/POLICY/311r

7. EFFECTIVE DATE. By order of the Director, DCMA, this Instruction is effective immediately.

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TABLE OF CONTENTS

REFERENCES.....3

CHAPTER 1 – POLICY

1.1. Policy 4

CHAPTER 2 – ROLES AND RESPONSIBILITIES

2.1. QA First-Level Supervisor (FLS) 5
2.2. QA Personnel Performing Process Review 5

CHAPTER 3 - PROCEDURES

3.1. Determine Process***(es)*** to be Reviewed.....6
3.2. Determine the Scope of the Process Review 6
3.3. Determine the Appropriate Review Method for Each Process 6
3.4. Conduct the Process Review for Each Process.....***7***
3.5. Document Results ***8***
3.6. Notification of Results ***8***

APPENDIX

~~Appendix A. Process Review - QA Flowchart .....9~~
Appendix ***A***. Contingency Contract Administration Services (CCAS) Requirements.....10

GLOSSARY

Acronyms.....11

REFERENCES

(a) DCMA-INST 311, "Process Review-QA," June 1, 2011 (hereby canceled)
(b) DoD Directive 5105.64, "Defense Contract Management Agency (DCMA)," January 10, 2013
(c) DCMA-INST 501, "Policy ***Publications*** Program," ***May 12, 2014***
(d) DCMA-INST 710, "Managers' Internal Control Program," ***April 21, 2014***
(e) DCMA-INST 309, "GCQA Surveillance Planning," ***June 03, 2014***
(f) DCMA-INST 303, "Critical Safety Items – QA," April 10, 2013
(***g***) International Organization for Standardization (ISO) 9000/AS 9100, "Quality Management Systems"
(***h***) DCMA-INST 324, "Product Examination ~~– QA~~," ***July 26, 2013***
(***i***) DCMA-INST 323, "Data Collection and Analysis," ***May 08, 2013***
(***j***) DCMA-INST 1201, "Corrective Action Process," ***September 23, 2013***

CHAPTER 1

POLICY

1.1. POLICY. It is DCMA policy that:

1.1.1. QA personnel determine the suitability, adequacy, effectiveness, and consistency of the supplier's processes to meet contractual requirements.

1.1.2. QA personnel use the results of PRs performed to provide a basis for the development of surveillance frequencies and of the confidence in the contractor's ability to successfully meet the contractual technical requirements.

1.1.3. QA personnel use the PR method of surveillance to the maximum extent possible to move their Government Contract Quality Assurance (GCQA) surveillance away from the detection of defects and towards the prevention of the defect occurring. The use of the PR method enables QA personnel to assess the adequacy of contractor processes to consistently produce conforming products. Analysis of the process measurement data provides the basis for identifying the greatest return on the expenditure of DCMA's touch labor by focusing surveillance activities on true high risk areas.

CHAPTER 2

ROLES AND RESPONSIBILITIES

2.1. QA FIRST-LEVEL SUPERVISOR (FLS). The FLS shall assure QA personnel possess the necessary competencies to perform the tasks defined in this Instruction as it relates to the assigned facility, contract, or product.

2.2. QA PERSONNEL PERFORMING PROCESS REVIEW. QA personnel shall:

2.2.1. Assure GCQA surveillance events that serve as a basis for this confidence have been accomplished IAW the established GCQA surveillance plan.

2.2.2. Coordinate with customers to correct any problems/concerns identified during contract technical review.

2.2.3. Develop a GCQA surveillance strategy and document it on the Risk Profile and Plan and adjust the plan as warranted by data analysis.

2.2.4. Issue corrective action requests when contractual nonconformances are identified.

2.2.5. Communicate with customers when problems/concerns arise during the performance of the GCQA surveillance plan.

2.2.6 Request QA engineer assistance when additional technical expertise may be needed for planning and/or conducting processes reviews. Areas where assistance may be warranted include Automated Test Equipment, materials, special processes, Non-Destructive Test, process capability, and statistical process control.

NOTE: QA personnel are strongly encouraged to request the assistance of assigned QAEs, or engineers with appropriate QAE competencies to accomplish the task(s) associated with this Instruction, when additional technical expertise may be needed for planning and/or conducting process reviews. ~~Areas where assistance may be warranted include automatic test equipment, materials, special processes, nondestructive test, process capability, and statistical process control.~~

CHAPTER 3

PROCEDURES

3.1. DETERMINE PROCESS*(ES)* TO BE REVIEWED. Process*(*es*)* to be reviewed will be identified IAW DCMA-INST 309, "GCQA Surveillance Planning" (Reference (e)), which includes the following: (**NOTE: See Appendix *A* for CCAS unique requirements.)**

3.1.1. Manufacturing and support processes that have a direct impact on quality are to be considered when identifying process to be reviewed.

3.1.2. Processes selected for a PR must be identified during risk assessment.

3.1.3. Processes selected for review must be identified on the GCQA surveillance plan as a cause or potential cause that, if not performed correctly by the supplier, may allow the risk statement to occur.

3.1.4. Data analysis should be performed on items that have been under product examination surveillance to determine if the GCQA method should be changed to PR. This will provide an earlier opportunity for identification of nonconformances/problems.

3.1.5. Process reviews should be added or updated on the surveillance plan based on a single risk event as described during risk assessment or on the results of data collection and analysis.

3.2. DETERMINE THE SCOPE OF THE PROCESS REVIEW.

3.2.1. The scope of each review shall be determined based on the applicable risk impact. If the risk impact is rated as high, then all process elements shall be reviewed. If the risk impact is rated moderate or low, the review may cover all elements or selected portions.

3.2.2. PR planning documentation shall identify the steps to be reviewed. ***IAW DCMA-INST 303, Critical Safety Items – QA" (Reference (f)),*** ~~I~~items with critical safety item requirements ***may*** have an associated list of important manufacturing processes (refer to complete list located on Resource Web Page), which may be used as a planning tool in performing a PR for any complex item.

3.3. DETERMINE THE APPROPRIATE REVIEW METHOD FOR EACH PROCESS.

3.3.1. A process may be reviewed as a single event or incrementally.

3.3.2. Planning for an incremental PR shall include identification of all the process elements planned for each increment.

3.3.3. Subsequent review increments are scheduled over a specified time period until all the planned elements have been reviewed.

3.4. CONDUCT THE PROCESS REVIEW FOR EACH PROCESS.

3.4.1. QA personnel shall review the process(es) selected from performing paragraph 3.1. to determine its adequacy in consistently producing a conforming product.

3.4.2. The PR will begin with a review of the supplier's documented procedures for each process selected.

3.4.2.1. QA personnel will assure that the procedures identify that the important aspects of the process are in the right sequence, have sufficient controls in place, and identify and address any special skills required. The procedures should be adequate to meet all contractual requirements as noted in the contract (e.g., ISO 9000-2008 (Reference (~~f~~***g***)), applicable drawings, the statement of work, specification requirements, or other related requirements) and should address the five key elements of a process that includes the process elements (4M+E) necessary to produce the product.

3.4.2.1.1. Methods. Verify that adequate methods are used for producing conforming products. Methods may include work instructions, test procedures, travelers, etc.

3.4.2.1.2. Manpower. Verify that the contractor is using people with the appropriate skill level and training to produce conforming product. Any contractual personnel qualification or certification requirements must be verified.

3.4.2.1.3. Material. Verify that materials used meet contractual and/or contractor-imposed technical requirements.

3.4.2.1.4. Machinery. Verify that equipment and facilities are adequate to produce conforming products and to comply with specifications and drawings. Verify that measuring and test equipment have the necessary accuracy and precision to assure production of conforming items and compliance with specifications and drawings, and that this equipment is included in the contractor's calibration program. Verify that any equipment, tooling, software, or facilities requiring qualification or certification approval have obtained approval from the responsible contractual authority or specification preparing activity. Verify that software used in running manufacturing, measuring, and test equipment is adequate to produce conforming products and to comply with specifications and drawings.

3.4.2.1.5. Environment. Verify that the processes are conducted under controlled environmental conditions IAW the contractual and/or contractor-imposed technical requirements, if applicable.

3.4.2.2. Noncomplex, critical items (as identified by the contract; e.g., critical application item) may involve only one or two of the most critical processes that determine the quality of the product. For more complex manufacturing facilities or facilities producing products that include a critical characteristic or that may involve safety of flight, Navy ~~s~~***S***pecial ~~e~~***E***mphasis, National

Aeronautics and Space Administration, life support, etc., QA personnel are encouraged to use an analytical tool such as a flowchart to reveal how the supplier plans to control each of the five key process elements throughout the manufacturing process.

3.4.3. Sample checklists (located on Resource Web Page) provide suggested process elements that QA personnel should take into account in the performance of a PR.

3.4.4. During the review of process inputs and controls, QA personnel shall:
(NOTE: See Appendix *A* for CCAS unique requirements.)

- Assess inputs against the technical requirements
- Witness and evaluate process steps/activities and controls in use
- Perform a product examination IAW DCMA-INST 324, "Product Examination ~~– QA~~" (Reference (***h***)) to ascertain if the process results meet the specified output requirements

3.5. DOCUMENT RESULTS. All inputs and output data reflecting each process element (e.g., 4M+E) shall be documented.

3.5.1. QA personnel shall accurately record the results of the PR when completed and in a suitable manner which will allow for use during data analysis IAW DCMA-INST 323, "Data Collection and Analysis" (Reference (***i***)).

3.5.2. Data points (supplier and Government) identified during PRs may be used to monitor ongoing process performance. As a minimum, the records shall contain:

- Date of review
- Person accomplishing review
- Supplier name
- Location of the review
- Process reviewed
- Supplier procedure/documentation references, revision number and date
- Items being processed at the time of the review by nomenclature, part number, serial number, batch number, etc.
- Elements of the process reviewed (e.g., 4M+E)
- Steps of the process reviewed
- Nonconformances found
- Traceability to corrective actions

3.6. NOTIFICATION OF RESULTS.

3.6.1. The results of the PR should be discussed with the supplier (and customer, if applicable) to include possible opportunities for improvement for processes exhibiting variations.

3.6.2. QA personnel shall initiate immediate corrective action IAW DCMA-INST 1201, "Corrective Action Process" (Reference (~~i~~*j*)), when the results indicate a contractual nonconformity.

APPENDIX *A*

CONTINGENCY CONTRACT ADMINISTRATION SERVICES (CCAS) REQUIREMENTS

Paragraph 3.1. At the end of the paragraph, add the following statements: Each service provided by the contractor is considered a process. These processes are routinely covered through service examinations using checklists. A process review is an evaluation of a service that involves evaluating characteristics of the service that may not be covered in the checklist. For example, a checklist may address a specific standard, but not all of the requirements. A process review can evaluate the additional requirements or increase the depth and scope of review typically used with the checklist(s). The Master Statement of Work, if required, can be used as a list of processes.

Paragraph 3.4.4. At the end of the third bullet, add the following sentence: Service examinations using checklists are equivalent to product examination.

GLOSSARY

ACRONYMS

4M+E	methods, manpower, material, machinery, environment
CCAS	Contingency Contract Administration Services
DCMA-INST	DCMA Instruction
FLS	first-level supervisor
GCQA	Government Contract Quality Assurance
IAW	in accordance with
ISO	International Organization for Standardization
PLAS	Performance Labor Accounting System
PR	process review
QA	quality assurance