

# **Supply Inventory Management**

Evaluation of the Defense Supply Center Columbus Qualified Products List and Qualified Manufacturers List Program (D-2002-090)

Department of Defense
Office of the Inspector General

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#### Acronyms

ASSIST	Acquisition Streamlining and Standardization Information System
COCT	Certificate of Conformance and Traceability

DLA Defense Logistics Agency
DSC Defense Supply Center
FAR Federal Acquisition Regulation
NSN National Stock Number

PQDR Product Quality Deficiency Report

QA Qualifying Activity

QAR
Quality Assurance Representative
QAS
Quality Assurance Specialist
QML
Qualified Manufacturers List
QPL
Qualified Products List

U.S.C. United States Code



#### INSPECTOR GENERAL DEPARTMENT OF DEFENSE 400 ARMY NAVY DRIVE ARLINGTON, VIRGINIA 22202–4704

May 14, 2002

#### MEMORANDUM FOR DIRECTOR, DEFENSE LOGISTICS AGENCY

SUBJECT: Evaluation of the Defense Supply Center Columbus Qualified Products List and Qualified Manufacturers List Program (Report No. D-2002-090)

We are providing this report for your review and comments. We considered management comments on a draft of this report when preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. As a result of management comments, we request that the Defense Logistics Agency provide additional comments on Recommendations 1. and completion dates on Recommendation 4. We request that management provide comments by July 15, 2002.

We appreciate the courtesies extended to the evaluation staff. For additional information on this report, please contact Mr. Kenneth H. Stavenjord at (703) 604-8952 (DSN 664-8952) (kstavenjord@dodig.osd.mil) or Mr. Jaime A. Bobbio at (703) 604-8915 (DSN 664-8915) (jbobbio@dodig.osd.mil). See Appendix C for the report distribution. The evaluation team members are listed inside the back cover.

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#### Office of the Inspector General of the Department of Defense

Report No. D-2002-090

May 14, 2002

(Project No. D2001PT-0023.001)

# Evaluation of the Defense Supply Center Columbus Qualified Products List and Qualified Manufacturers List Program

#### **Executive Summary**

**Introduction.** This report is a review of the Defense Supply Center Columbus Qualified Products List and Qualified Manufacturers List Program. The Defense Supply Center Columbus Qualified Products List/Qualified Manufacturers List Program was started in 1962 when qualifying activity responsibility for about 75 Qualified Products Lists was transitioned from the Military Departments. The Defense Supply Center Columbus currently has management responsibility for over 300 Qualified Products Lists and 4 Qualified Manufacturers Lists. The Defense Supply Center Columbus actively procures approximately 186,000 National Stock Numbers from Qualified Products Lists with sales of over \$126 million in FY 2000. The Sourcing and Qualifications Unit was assigned the responsibility of managing the Qualified Products List/Qualified Manufacturers List Program. Because the Defense Supply Center management directed the Sourcing and Qualifications Unit to shift engineers to the Commodity Management Group and Base Reutilization and Closure, the workforce has been reduced from approximately 90 staff-years in FY 1989 to 50 staff-years in FY 2000. In the same time period, the Qualified Products Lists and Qualified Manufacturers Lists managed increased from 164 to over 300.

**Results.** Defense Supply Center Columbus did not have an effective manufacturer and product qualification list program.

- Certification and retention policy for its qualified manufacturers was not fully enforced. Specifically, 512 (42.8 percent) of the required 1,196 manufacturing line audits scheduled during 1999-2000 were not accomplished. Some of the manufacturing lines have gone 8 years without certification.
- The Sourcing and Qualifications Unit did not receive 1,739 Product Quality Deficiency Reports required to monitor the Qualified Products List and Qualified Manufacturers List Programs.
- The Sourcing and Qualifications Unit could not trace sources and authenticity of their products because they did not receive 6,479 certificates of conformance and traceability.

As a result, manufacturers without the proper certification remained in the Qualified Products List and Qualified Manufacturers List Program. Further, the Services, which rely on these programs, are subjected to a higher risk of receiving nonconforming parts. For details of the evaluation results, see the Finding section of this report.

Summary of Recommendations. We recommend that the Commander, Defense Supply Center Columbus, fully implement the procedures specified in the DoD and Defense Logistics Agency regulations to either recertify the manufacturer or remove it from the Qualified Products List/Qualified Manufacturers List Program; provide product quality deficiency reports and certificates of conformance and traceability documentation to the Defense Supply Center Columbus qualified products list managers; and perform a review of resources required to accomplish the certification and provide adequate resources in order to accomplish the mission.

Management Comments. The Director, Defense Logistics Agency partially concurred with the finding and recommendations. The Director did not concur that they did not have an effective program and stated that the program effectiveness should have been based on avoiding procurement delays. They partially concurred with either recertifying or removing manufacturers from the lists and stated that the policy does not have such a provision. The Defense Logistics Agency partially concurred with providing product quality deficiency reports and certificates of conformance and traceability to Qualified Products List and Qualified Manufacturers List managers and proposed implementing actions, and concurred with performing a review of resources to accomplish the certifications. A discussion of management comments is in the Finding section of the report and the complete text is in the Management Comments section.

**Evaluation Response.** Shorter lead times are included in the Oualified Products List and Qualified Manufacturers List Program objectives as is improved readiness through availability of reliable products. Our evaluation focused on the latter, compliance with Qualified Products List and Qualified Manufacturers List requirements as part of the Quality Assurance Programs. The Defense Logistics Agency does have the authority to remove manufacturers from the Qualified Products List and Qualified Manufacturers List when it is necessary to protect the Government and the users' interest. In the response to the final report, we request that the Defense Logistics Agency reconsider their position and provide comments to the recommendation to remove manufacturers until their qualification audits are current. The Defense Logistics Agency proposals for providing product quality deficiency reports and certificates of conformance and traceability to Qualified Products List and Qualified Manufacturers List managers, along with reported corrective actions underway, meet the intent of our recommendations. The Defense Logistic Agency proposed review of resources required to accomplish the certifications meets the intent of our recommendation. In response to the final report, we request that the Defense Logistics Agency provide completion dates for the review of engineering resources required to accomplish the certifications. We request that the Defense Logistics Agency provide the additional comments on Recommendations 1. and 4. by July 15, 2002.

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### **Background**

Section 2452, title 10, United States Code (10 U.S.C. 2452), "Duties of the Secretary of Defense," requires the Secretary to develop and maintain the supply catalog and the standardization program to establish, publish, review, and revise, within the Department of Defense, military specifications, standards, and lists of qualified products as described in 10 U.S.C. 2451. The Federal Acquisition Regulation (FAR) subpart 9.2, "Qualifications Requirements," implemented 10 U.S.C. 2319, "Encouragement of New Competitors," and 41 U.S.C. 253c, "Encouragement of New Competition," and prescribed policies and procedures regarding qualification requirements and acquisitions that were subject to such requirements. Sections 9.201 and 9.203 of the FAR defined and described the Qualified Products List (QPL) and Qualified Manufacturers List (QML) Program.

The QPL and QML Program aims to increase product quality, reliability, and buying productivity, and enhance logistics management operations by establishing a list of products that have met the qualification requirements stated in the applicable specification. The requirements will also include appropriate product identification and test or qualification reference with the name and plant address of the manufacturer and distributor as applicable for select commodities. Instead of source inspections and product verifications, quality levels are maintained through initial and periodic certification of the manufacturer by the Government, use of deficiency reporting information provided by the user, and product quality control procedures maintained by the manufacturer. The intended results are shorter lead times for acquisition and procurement, reduced test costs, and improved readiness through continuous availability of reliable products from viable suppliers. Policies and procedures for the Qualification Program (QPL and QML) are contained in Appendix B of "Defense Standardization Program (DSP) Policies and Procedures," DoD Manual 4120.24-M, March 2000. Definitions of technical terms for the QPL and QML Program are in Appendix B, and some of its salient features are described as follows.

Qualifying Potential Products, Processes, and Materials. Qualification is the process by which products, processes, or materials of manufacturers or distributors are independently examined and tested to determine whether they conform to specification requirements before they are acquired. Products and manufacturers that successfully pass the qualification process are then identified on a list of qualified products or qualified manufacturers. Criteria to retain qualification are applied periodically to ensure continued integrity of the qualification status.

Maintaining the Product Quality. Once a product or manufacturer is added to a QPL and QML, the manufacturer, the user, and the Government are responsible for maintaining product quality. The manufacturer maintains adequate process and quality control procedures and conducts specified testing to ensure that items continually comply with all specification requirements. In addition, the manufacturer maintains trend analysis and reports of deficiencies disclosed during testing, and ensures that delivered items conform to all requirements. The user ensures that the qualified products delivered comply with the specification requirements by reporting any nonconformances to the qualifying activity (QA) and by submitting periodic summaries of quality control monitoring results that reveal adverse quality and reliability trends to the QA. The QA is responsible for the overall management of the QPL and QML Program and must verify the manufacturer's compliance to the specified requirements.

The QA is also required to take appropriate action on any reported nonconformance and quality or reliability problems associated with QPL and QML products.

**Qualified Products List.** A QPL will normally be appropriate for products of supply, which have a stable design and composition and will be continually available for extended periods of time, thereby making it practicable to qualify individual products without incurring prohibitive testing costs. A product that meets the established qualification requirement will be listed on the QPL. The QPL contains in most cases less complex products such as cables, resistors, or hoses.

**Qualified Manufacturers List.** A QML focuses on qualifying a manufacturer's materials and processes rather than products. A QML will normally be appropriate for items of supply that are experiencing very rapid technological advances or have a myriad of variations or custom designs that make individual product qualification impractical or excessively expensive. A QML applies to processes or materials that generally meet the following criteria:

- they do not have recognized industry part numbers;
- they are procured to a specification that covers a wide range of technologies, like hybrid microcircuits; and
- they are a family of products with similar characteristics, like printed wiring boards.

Representative worst case test vehicles or representative samples that contain all potential combinations of materials and processes used during production are carefully examined in order to determine acceptability limits. As evidence that those processes and materials meet the established qualification requirements, the envelope of acceptance processes and materials will be listed on a QML. For example, for microcircuits that require ceramic capability, when an order is placed, the manufacturer will ensure that all certification, qualification, and documentation items are complete as required by the Defense Supply Center (DSC) Columbus approved quality management plan. The manufacturer will also submit to the qualifying activity a certificate of compliance for the applicable standard microcircuit drawing. Upon completion of these requirements, the product listing information will be transferred to the QPL as a qualified product.

**QPL Review and Certification.** The qualifying activity must review specifications that require qualification every 2 years to determine the need to continue the qualification requirement. In addition, the qualifying activity is responsible for reviewing and certifying on a periodic basis each listed manufacturer. Furthermore, the qualifying activity shows whether more definitive product requirements, advances in manufacturing techniques and quality control methods, or improvements in testing apparatus and techniques have eliminated the need for qualification. The certification process also determines whether the listed products are manufactured at the same plants shown on the listing and whether they are being manufactured under the same conditions as when first qualified. The process also determines whether the plants have remained under the same management and manufacturing controls. To obtain qualification approval of products, one of the following actions is required: a. certification by the manufacturer (submittal of a DD 1718 form "Certification of Qualified Products"); b. periodic submission of new test data, as may be required in the specification; or c. complete requalification testing, as required in the specification or by the QA.

QML Review and Certification. The qualifying activity is responsible for reviewing and recertifying on a periodic basis the continued need for each QML. In addition, the qualifying activity must review specifications that require qualification every 2 years to determine the need to continue the qualification requirement. QML includes reviewing the manufacturer's annual retention of qualification reports according to the requirements of the applicable specification, performing periodic facility audits, and reviewing design and construction or other changes made by the manufacturer to the qualified products as delineated in the applicable military specifications. This review process helps assure continued manufacturer compliance and up-to-date qualification requirements (including associated quality conformance and reporting requirements). The process also determines whether the plants have remained under the same management and manufacturing controls.

QPL and QML Program at Defense Supply Center Columbus. The QPL Program at DSC Columbus began in 1962 when qualifying activity responsibility for about 75 QPLs was transitioned from the Military Departments. From 1962 until 1989, the number of QPLs assigned to DSC Columbus increased to about 164. After acquisition reform, the number of QPLs and QMLs assigned to DSC Columbus nearly doubled, due to the Secretary of Defense's decision to have buying commands like DSC Columbus assume more control over the products they actually procure for the Services and Defense agencies. DSC Columbus currently has management responsibility for approximately 300 QPLs and 4 QMLs. Over one million individual part numbers are qualified and listed on the applicable DSC Columbus managed QPLs and QMLs. DSC Columbus actively procures about 186,000 national stock numbers (NSNs) from about 900 qualified manufacturers and distributors with sales of over \$126 million in FY 2000. These qualified NSNs include monolithic microcircuits, hybrid microcircuits, aircraft hydraulic hoses, vacuum and de-icing system components, resistors, capacitors, filters, circuit breakers, switches, connectors, relays, fiber optic conductors and cables, semiconductors devices, antennas, waveguides, and electrical boards.

DSC Columbus primary management of the QPLs and QMLs is the responsibility of the Sourcing and Qualifications Unit, which is comprised of four teams that contribute to the maintenance of its QPLs and QMLs. These are the Custom Devices Team, Electronic Devices Team, Hybrid Devices Team, and Passive Devices Team. These teams follow DoD Manual 4120.24-M to manage their QPL and QML Programs. The teams are responsible for administering the qualification program, maintaining and publishing QPL and QML listings, and ensuring the manufacturers' compliance with qualification requirements. In addition, the applicable specifications include the detailed qualification and retention requirements to assure continuous product performance, quality, and reliability. All specifications and corresponding QPLs and QMLs are maintained in the DoD Acquisition Streamlining and Standardization Information System (ASSIST).

The Plans and Policy Division serves as the focal point for receiving complaints in the form of Product Quality Deficiency Reports (PQDRs), providing entry to the Customer Depot Complaint System, and distributing the complaints to an appropriate quality assurance specialist (QAS) for investigation, resolution, and response. Each QAS provides quality assurance support to the product-buying units that are assigned the management and procurement responsibilities for a group of NSNs, including QPLs. Upon receiving a complaint, the QAS assesses the need for investigation, initiates the necessary corrective actions for the reported defective items, and coordinates with other elements and components within DSC Columbus as applicable.

DSC Columbus has in the past worked conscientiously to promote the use of the QPL and QML Program by the Services, and Federal and civilian agencies. The QPL and QML Program within DSC Columbus Operations Support Group is consistently applied across the various industry sectors. The Sourcing and Qualifications Unit consists of highly trained engineers and experienced technicians.

# **Objective**

Our objective was to evaluate the Defense Supply Centers' Quality Assurance Programs. Specifically, we evaluated the effectiveness of the Defense Supply Center Columbus Qualified Products List and Qualified Manufacturers List Program. The evaluation also reviewed the management control program as it related to the evaluation objective. See Appendix A for the scope and methodology, management control program review, and a summary of prior coverage.

# Effectiveness of Management of the Qualified Products List and Qualified Manufacturers List Program

DSC Columbus did not have an effective Qualified Products List and Qualified Manufacturers List Program. It did not fully enforce the certification and retention policy for its qualified manufacturers. A total of 512 (42.8 percent) of the required 1,196 qualification product manufacturer facility and lines audits, scheduled during 1999-2000, were not accomplished. Its Sourcing and Qualifications Unit did not receive 1,739 Product Quality Deficiency Reports required to monitor the QPL and QML Program. DSC Columbus could not trace sources and authenticity of their products because DSC Columbus did not receive 6,479 Certificates of Conformance and Traceability (COCTs) from dealers and distributors. As a result, manufacturers without the proper certification remained in the QPL and QML Program. Further, the Services, which rely on these programs, are subjected to a higher risk of receiving nonconforming parts.

# **Retention of Qualification Policy**

DoD has established policy and guidance in DoD Manual 4120.24-M for a manufacturer's certification and retention of qualification. The process involves the qualifying activity's certification of each manufacturer's qualification status every 2 years. To retain qualification approval of products, one of the following actions is required:

- certification by the manufacturer,
- periodic submission of new test data as may be required in the specification, or
- complete requalification testing as may be required in the specification or by the qualifying activity.

The Qualifying Activity shall determine, based on the extent of specification or product changes and other available data, whether products or manufacturers need to be removed from the QPL or QML until retested. If the Qualifying Activity determines that the product or manufacturer should remain on the QPL or QML, the Qualifying Activity shall establish a maximum time limit for submission of the samples or test data before removal. The Qualifying Activity shall require the reexamination of a qualified product when required by retention of qualification requirements in the specification.

### **Results of Retention of Qualification Process at DSC Columbus**

The Sourcing and Qualifications Unit at DSC Columbus stated that it conducts audits on a scheduled basis every 1-5 years depending on the specification requirements. Some specifications call for retention every year for such items procured by DSC Columbus for the National Aeronautical and Space Administration, which demands very stringent

safety requirements. The process involves facility audits by DSC Columbus engineers in accordance with applicable specifications. At the conclusion of an audit, the manufacturer is required to take corrective action on any deficiencies found. After the Sourcing and Qualifications Unit accepts the corrective actions, the manufacturer is considered "certified," and retains its qualification status on a QPL or QML. The Unit also receives retention reports, product failure notices, and product test data, which form a basis for continuing a manufacturer's QPL or QML product qualification.

#### **Results of Retention of Qualification Assessment**

We reviewed the certification status of the qualified manufacturers managed by four teams within the Sourcing and Qualifications Unit: Customs Devices Teams (VQC), Electronics Devices Team (VQE), Hybrid Devices Team (VQH) and Passive Devices Team (VQP). The teams were responsible for requalifying 1,196 manufacturing lines during the 1999-2000 2-year cycle. VQC was responsible for requalifying 450 of the manufacturing lines during its 2-year certification cycle, but conducted audits for only 210 manufacturing lines during that period of time. As seen in Figure 1, the other branches had similar results. VQH, VQE, and VQP did not meet their requirements for the requalification of 178, 216, and 352 manufacturing lines respectively.

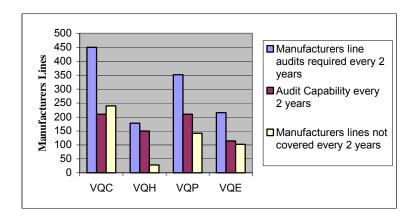


Figure 1. Sourcing and Qualifications Unit QPL/QML Audit Requirements Versus Capability

The 1,196 manufacturing lines requiring certification in the 2-year cycle were composed of 684 for the QML Program and 512 for the QPL Program. Our review determined that 286 or 41.81 percent of the QML manufacturing lines were not audited. Similarly, 226 or 44.14 percent of the QPL manufacturing lines were not audited. In total 512 or 42.80 percent of manufacturing lines that needed certification were not audited. We also found that some of the manufacturing lines have gone 8 years without certification.

# DSC Columbus Sourcing and Qualifications Unit Personnel and Workload

A review of the QA staffing demonstrated that a significant reduction in personnel had occurred since 1989. Moreover, during the same period, their QPL and QML workload had increased significantly. As seen in Figure 2, the number of positions associated with the program decreased from 90 in 1989 to 50 at the end of FY 2000. Conversely, the QPL and QML workload managed by the QA increased dramatically over the same period, from 164 QPL/QML in 1989 to around 300 at the end of FY 2000. Currently, the assigned resources have to administer the QPL and QML Program, accomplish a wide range of engineering certification tasks to maintain the QPL and QML Program, and respond to new qualification applications. The Sourcing and Qualifications Unit staff stated that the lack of staffing is the cause for outdated certifications.

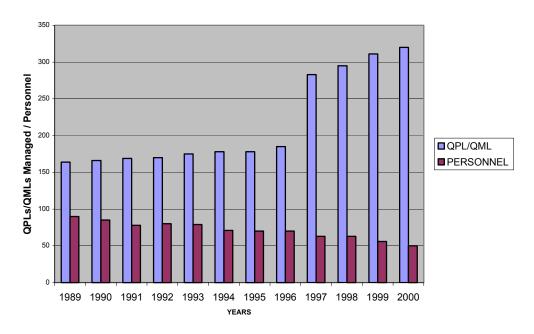


Figure 2. QPL/QML Workload Versus Personnel

# **Quality Assurance Policy Regarding PQDRs**

DoD Manual 4120.24-M mandates that the buying activity provides feedback based on field information to the QA. Furthermore, DSC Columbus Integrated Policy Memorandum IPM-97-0048 establishes a QPL and QML Quality Assurance Policy which details the program's use of PQDRs:

Quality associates will immediately notify DSCC-VA [Document Standardization Unit] and VQ [Sourcing and Qualifications Unit] of all validated reports of component failures or other quality problems (Product Quality Deficiency Reports and validated defective test results) which may impact DSCC-V [Operations Support Group] administered QPL/QML

products. DSCC-VA and VQ shall alert the QAS on actions taken as a result of the initial report of component failure or report of other quality problems.

# **PQDR Role in the Quality Assurance Process**

The PQDRs are the primary source for the QPL and QML system feedback for DLA and the Services on quality. It is an important quality control measure inherent to the success of the QPL and QML Program. The quality assurance specialists in the Plans and Policy Division are required to review each PQDR to determine whether additional acceptance testing would be required on a product and take the appropriate corrective action with a manufacturer. Information regarding quality-related problems with qualified products is also important for maintaining the QPLs and QMLs. However, at DSC Columbus, problems existed with the ability of the Sourcing and Qualifications Unit to acquire such feedback because the policy for quality assurance specialists to provide PQDRs to the Sourcing and Qualifications Unit was not enforced. For example, in the year 2000, 1,739 QPL and QML related PQDRs were submitted to DSC Columbus but were not provided to the Sourcing and Qualifications Unit. As a result, QPL and QML management could not adequately monitor its product deficiencies and could not take corrective actions.

# **Qualification Program Policy Regarding Certificate of Conformance and Traceability**

The requirement for COCT is documented in several of the critical high reliability military specifications in order to ensure that an authentic QPL or QML part is received when ordered. The COCT requirement provides traceability from the original QPL or QML qualified manufacturer to the buying command, agency, or user of the part. The COCT documentation attempts to reduce the risk of unauthorized substitutes and fraud from dealers and distributors. Furthermore, it provides the QA with tools to determine if qualified parts were produced by a qualified manufacturer, thereby reducing the incidence of part substitutions and counterfeit material.

DSC Columbus local policy E-25 covers the relationship between the qualification program and the use of COCT. The traceability clause in the E-25 policy is used as a tool for quality control in the QPL and QML Program. This policy is attached to each DSC Columbus contract and mandates that dealers submit three copies of certification to the Government Quality Assurance Representative (QAR) with the products offered for acceptance. After the QAR has accepted the products offered, acceptance and approval of the traceability certifications is indicated by signing two copies of the certification, also ensuring that the contract number is included on both copies. The contractor is mandated to provide these two copies to DSC Columbus. The third copy must be retained by the QAR.

# Review of Certificate of Conformance and Traceability Status at DSC Columbus

At DSC Columbus, two types of procurement inspection processes are used. These are designated as destination and source inspections. A Defense Contractor Management Agency QAR inspector provides inspection at the source to check the product for

authenticity. Destination inspection does not involve the Government inspector but relies on the user to obtain a copy of the COCT. Currently, approximately 60 percent of the QPL items are designated for destination inspection. DSC Columbus Sourcing and Qualifications Unit did not receive copies of COCTs from dealers and distributors. For example, in the year 2000, 6,479 COCTs were required at DSC Columbus but the Sourcing and Qualifications Unit received none.

Additionally, a recent audit conducted by the DSC Columbus internal review office investigated traceability problems in the QPL process. The audit team selected 625 contracts from dealers and distributors and conducted a random selection of 100 contracts. The audit found that only 6 out of 100 contracts contained COCT documentation. The audit showed that dealers were unable to provide the required COCT from the original manufacturers.

Therefore, the Sourcing and Qualifications Unit was unable to determine the authenticity of the product and recommended not accepting products from dealers or distributors. As a result, the Sourcing and Qualifications Unit cannot take appropriate action against a noncompliant dealer or distributor.

#### **Summary**

DSC Columbus did not have an effective QPL and QML Program because it did not fully enforce the certification and retention policy for its qualified manufacturers. The Sourcing and Qualifications Unit did not conduct the necessary number of line audits associated with its qualified manufacturers. As a result, 42.8 percent of the required 1,196 qualification product manufacturer facility and lines audits, scheduled during 1999-2000, were not accomplished. Further, the Sourcing and Qualifications Unit at DSC Columbus was not receiving PQDRs and COCTs because the policy was not enforced. Without reviewing PQDRs and COCTs, the Sourcing and Qualifications Unit could not effectively monitor product quality, authenticity, or source and could not take corrective actions against nonconforming QPL and QML contractors. As a result, some quality control aspects of the qualification program have become ineffective. Products from qualified manufacturers that have not been recertified during the required requalification cycle may be at a higher risk of not conforming to the required specifications. Customers receiving items procured from the QPL and QML Program may have a false sense of reliability or quality and may be subjected to an increased risk of receiving nonconforming parts.

# **Management Comments on the Finding and Evaluation Response**

The Defense Logistics Agency partially concurred with the finding, but did not concur with "DSC Columbus did not have an effective manufacturing and product qualification program." They stated that they schedule and conduct facility audits within resource allocations and established priorities. They further stated that the effectiveness of the QPL and QML Program should be based on how well it facilitates the "procurement process by qualifying parts and/or manufacturers in advance of actual procurement or contracts, thereby avoiding delays . . .".

DLA suggested that we change "recertification" to "certification" since "certification is the terminology used in DoD 4120.24-M." They also suggested that we change

"preparing activity" to "qualifying activity" since the qualifying activity is responsible for reviewing and certifying each QPL and QML manufacturer on a periodic basis.

**Evaluation Response.** Shorter lead times are included in the QPL and QML Program objectives. Likewise, improved readiness through continuous availability of reliable products from viable suppliers is also an objective. Our evaluation focused on the compliance with QPL and QML requirements as part of the Defense Supply Center's Quality Assurance Programs. Our finding and its causes are documented in the body of the report.

We incorporated the suggested changes relative to using "certification" instead of "recertification" and "qualifying activity" instead of "preparing activity."

# Recommendations, Management Comments, and Evaluation Response

We recommend that the Commander, Defense Supply Center Columbus, Defense Logistics Agency:

1. Fully implement the procedures specified in DoD Manual 4120.24-M, "Defense Standardization Program (DSP) Policies and Procedures," March 2000, for Qualified Products List and Qualified Manufacturers List Programs, to either certify the manufacturer within the required cycle or remove the manufacturer from the Qualified Products List and Qualified Manufacturers List Program.

Management Comments. DLA partially concurred with the recommendation, stating that DSC Columbus "plans their product qualification audits within resource allocations based upon the prioritization criteria," that they "have resource constraints that must be managed," and that "engineering resources will be continually reviewed." However, they also stated that DoD policy does not include a provision for them to "remove manufacturers from a QML/QPL solely because the QA did not perform a facility (plant) audit, nor 'recertify' the manufacturer within the required cycle."

**Evaluation Response.** Authority to remove manufacturers from the QML and QPL Program is contained in DoD Manual 4120.24-M, which states in part:

The Qualifying Activity may remove a product, a manufacturer, or a process; decertify a manufacturer; or stop shipment, when such action is necessary to protect both the Government's interest and the interest of the users of the QPL or the OML.

The manual illustrates circumstances under which removal "might" be warranted. While the illustrated examples of circumstances do not specifically include the Government lack of compliance with the certification cycle, the intent to keep only currently qualified products or manufacturers on the list is illustrated by the example of removal when "the manufacturer has not complied with the retention of qualification requirements."

DLA acknowledged that "qualification audits are important tools to mitigate quality problems and assure continued product performance, quality and reliability." However, with 42.80 percent of manufacturing lines that needed certification not being audited and with some manufacturing lines having gone 8 years without certification,

removing the manufacturer from the QPL and QML Program until the certification is accomplished meets the policy criteria of being necessary to protect both the Government's interest and the interest of the users of the QPL or the QML.

In response to the final report, we request that DLA reconsider their position of not removing manufacturers from the Qualified Products List and Qualified Manufacturers List until their qualification audits are current.

2. Provide Product Quality Deficiency Reports information to the Qualified Products List managers at the Defense Supply Center Columbus, the Defense Logistics Agency, and the Military Departments to update the Qualified Products List.

**Management Comments.** DLA partially concurred with this recommendation, stating that this finding was not a specific requirement of the QPL and QML Program. DLA believes that the PQDR feedback to the QPL and QML manager adds value to the QPL and QML Program. They also believe that the PQDR feedback will help the inventory control point in obtaining remedial action by suppliers of defective parts sold to DLA. The DSC Columbus Policy and Plans Division (DSCC-BDT) began sending a list of opened and closed PQDRs on QPL and QML items with its associated NSNs grouped by Federal Stock Classes to the QA in November 2001. The list was distributed to the QA Team Chiefs responsible for the affected QPL and QML items. The QPL and QML engineers will research the PQDRs to determine whether the affected QPL and QML part has defects that would warrant actions against the QPL and QML manufacturer or distributor. If warranted, the engineer will be able to take actions to stop a company's QPL and QML shipments of the affected product, issue problem reports, and/or remove the company from the QPL and QML. The QPL and QML engineers will also work with the QAS to help in obtaining remedial consideration for defective parts or replace defective parts. The PQDR data is then input to the master DSC Columbus QPL and QML database for future reference and determination of whether a negative trend is developing with a particular supplier.

**Evaluation Response.** The use of deficiency reporting information provided by the user is an essential element of maintaining quality levels with the QPL and QML Program. The PQDRs are the primary source of user feedback on quality. Further, DSC Columbus Integrated Policy Memorandum IPM-97-0048 details the programs use of PQDRs. Our finding on PQDR feedback was also confirmed in a DSC Columbus Internal Review audit report (DSCC-DI 19-01 report dated November 16, 2001). The reported corrective actions underway meet the intent of our recommendation.

3. Provide Certificate of Conformance and Traceability information to the Qualified Products List managers at the Defense Supply Center Columbus, the Defense Logistics Agency, and the Military Departments to determine authenticity of a product.

Management Comments. DLA partially concurred with this recommendation, stating that this finding is not specific of the QPL and QML Program per se. The COCT is a requirement in several military high-reliability specifications to help ensure that authentic QPL and QML parts are received when ordered. DLA concurred that DSC Columbus must receive COCTs whenever they are specified in a requirement document (i.e., military specification), and invoked in the contract. The QA at DSC Columbus was in the process of taking corrective action before the Office of the Inspector General of the Department of Defense review.

The following actions have already been implemented at DSC Columbus. A local contract clause (E-25) has been revised to be sure the requirement to submit a COCT is clear to the suppliers, and the buying directorates have established a point of contact to track the receipt of the COCTs. The QAS at the buying directorates will review the COCTs for adequacy and correctness. In addition, the E-25 clause was changed to require the suppliers to provide a copy of the COCT to the QPL and QML managers. This will allow the QPL and QML managers to spot check to make sure that COCTs are received and that parts themselves have been qualified.

**Evaluation Response.** DLA concurred that DSC Columbus must receive COCTs whenever they are specified in a requirement document, and invoked in the contract. As stated in the finding, DSC Columbus could not trace sources and authenticity of their products because they did not receive COCTs. User feedback including COCTs will facilitate corrective actions. The actions implemented above meet the intent of our recommendation.

4. Perform a review of resources required to accomplish the recertification and provide adequate resources to accomplish the mission.

Management Comments. DLA concurred with this recommendation, stating that due to resource constraints and DoD imposed resource limits, DSC Columbus had to adjust their resources. Consequently, the DSC Columbus QA has to prioritize the periodic product qualification audits and adjust audit frequencies. They proposed to review engineering resources, review recruitment actions to fill critical engineering vacancies, and increase automation to improve efficiency and effectiveness.

**Evaluation Response.** In response to the final report, we request that DLA provide completion dates for the review of engineering resources required to accomplish the certifications.

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# **Appendix A. Evaluation Process**

# **Scope and Methodology**

To accomplish the evaluation objective, we examined DSC Columbus management of the QPL and QML Program including qualification process, maintenance of specifications and lists of contractors, and its response to quality related problems associated with QPL and QML items.

We reviewed the DSC Columbus organizational structure, QPL and QML related maintenance actions, and reported deficiencies against qualified products. We obtained and reviewed DSC Columbus's 4 QMLs and 300 QPLs containing 186,000 NSNs and analyzed data from 3 deficiency reporting programs: PQDR, Product Verification Program, and Government Industry Data Exchange Program. We evaluated the QPL and QML Program's retention of qualification requirements managed by DSC Columbus. Results of the evaluation provided insight into the effectiveness of the program and the adequacy of its quality control efforts.

General Accounting Office High-Risk Area. The General Accounting Office has identified several high-risk areas in DoD. This evaluation provides coverage of the DoD Inventory Management high-risk area.

Use of Computer-Processed Data. To achieve the evaluation objective, we used the DSC Columbus Internal Review Audit Office statement of the number of PQDRs received by DSC Columbus that were associated with QPL and QML NSNs. The statement was based on their analysis of both active and inactive databases. We did not establish the reliability of the computer databases and nothing came to our attention that caused us to doubt the reliability of their databases. However, establishing the reliability of the databases will not materially affect the results of our evaluation because the issue was not based upon the exactness of the number.

**Evaluation Dates and Standards.** We performed this evaluation from March 2001 through September 2001 according to standards implemented by the Inspector General of the Department of Defense.

**Contacts During the Evaluation.** We visited or contacted individuals and organizations within DoD. Further details are available on request.

# **Management Control Program Review**

DoD Directive 5010.38, "Management Control (MC) Program," August 26, 1996, and DoD Instruction 5010.40, "Management Control (MC) Program Procedures," August 28, 1996, require DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of the Review of the Management Control Program. We reviewed the management control program related to the overall evaluation objectives and determined

that the pertinent management controls concerning the QPL and QML Program were inadequate (see the Finding).

Adequacy of Management Controls. We identified material management control weaknesses at DSC Columbus as defined by DoD Instruction 5010.40. DSC Columbus controls over the QPL and QML Program were not adequate to insure compliance with regulations and management controls for the certification and retention of its qualified manufacturers. In addition, the Sourcing and Qualifications Unit could monitor neither PQDR nor COCT documentation because the appropriate mechanisms had not been instituted between those receiving PQDRs and COCTs and those maintaining the QPL and QML. If management implements all recommendations, the management control weaknesses will be corrected. A copy of the report will be provided to the senior official responsible for management controls within DSC Columbus.

**Adequacy of Management's Self-Evaluation.** DSC Columbus management did not identify management of the QPL and QML Program as an assessable unit and, therefore, did not identify or report the QPL and QML Program management control weaknesses identified by the evaluation.

#### **Prior Coverage**

#### **Inspector General of the Department of Defense (IG DoD)**

IG DoD Report No. D-2002-080, "Quality Deficiency Reporting Procedures for Naval Repair Parts," April 5, 2002

IG DoD Report No. D-2001-054, "Defense Logistics Agency Product Verification Program," February 21, 2001

IG DoD Report No. D-2001-002, "Defense Logistics Agency Customer Returns Improvement Initiative Program," October 12, 2000

IG DoD Report No. 98-063, "Defense Logistics Agency Product Quality Deficiency Program," February 5, 1998

# **Appendix B. Definitions of Technical Terms**

Certification of Conformance and Traceability. Certification is a written document described in a specification, signed by the company official for a product supplied, manufactured, and tested in full compliance with the specification requirements. The manufacturer's certificate is sent with each shipment to a customer to ensure that complete product compliance and traceability from the original manufacturer is maintained through any intermediate sources such as a distributor or dealer to a customer.

**Distributor.** Anyone authorized by the manufacturer to distribute the manufacturer's product. This includes the distributor authorized by the manufacturer to rebrand and distribute the manufacturer's rebrand product under the distributor's own brand.

**Facility.** One or more buildings or plant sites (usually co-located) used to design, manufacture and/or test components.

**Hybrids Manufacturing Line.** DSC Columbus considers the substrate fabrication area to be one manufacturing line, the assembly area to be another line, and the test area to be a third line.

**Manufacturing Line**. Primarily refers to a unique set of manufacturing processing steps necessary (usually described by the QPL or QML manufacturer as a manufacturing flow) to produce a given technology and/or product type.

**Microcircuits Manufacturing Lines**. Manufacturing lines are segmented by the following functional areas: design, wafer fabrication, assembly, and test. There is typically a count of three or more lines per facility audit.

**Preparing Activity**. The DoD activity responsible for the preparation, coordination, issuance, and maintenance of standardization documents.

**Qualification**. A process in advance of, and independent of, an acquisition by which a manufacturer's capabilities or a manufacturer's or distributor's products are examined, tested, and approved to be in conformance to the applicable specification requirements, and subsequent approval for a listing of products on a QPL, or manufacturers on a QML.

**Qualifying Activity**. An activity that is either the preparing activity or the adopting activity of the specification or its designated agent, as specified in the specification or as directed by the national qualification agency.

**Qualified Manufacturers List.** A list of manufacturer facilities that have been evaluated and determined to be acceptable based on the testing and approval of a sample specimen that conforms to the applicable specification. A Qualified Manufacturers List focuses on qualifying a manufacturer's material and process rather than products.

**Qualified Products List**. A list of products that have met the qualification requirements stated in the applicable specification. The entry for each listed item includes the appropriate product identification, the test or qualification reference, and the name and plant address of the manufacturer and distributor.

**Supplier.** Final source of a product to a customer that may be identified as a distributor, manufacturer, or other entity.

# **Appendix C. Report Distribution**

# Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics Under Secretary of Defense (Comptroller) Deputy Chief Financial Officer Deputy Comptroller (Program/Budget)

# **Department of the Army**

Auditor General, Department of the Army

#### **Department of the Navy**

Naval Inspector General Auditor General, Department of the Navy

# **Department of the Air Force**

Assistant Secretary of the Air Force (Financial Management and Comptroller) Auditor General, Department of the Air Force

# **Other Defense Organizations**

Director, Defense Logistics Agency Commander, Defense Supply Center, Columbus

# **Non-Defense Federal Organization**

Office of Management and Budget

# Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services Senate Committee on Government Affairs

House Committee on Appropriations

House Subcommittee on Defense, Committee on Appropriations

House Committee on Armed Services

House Committee on Government Reform

House Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations, Committee on Government Reform

House Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform

House Subcommittee on Technology and Procurement Policy, Committee on Government Reform

# **Defense Logistics Agency Comments**



**DEFENSE LOGISTICS AGENCY HEADQUARTERS** 

8725 JOHN J. KINGMAN ROAD, SUITE 2533 FT. BELVOIR, VIRGINIA 22060-6221

IN REPLY REFER TO

MAR 1 4 2002

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING DEPARTMENT OF DEFENSE

SUBJECT: Draft DoD IG Audit Report on the Evaluation of the Defense Supply Center Columbus's Qualified Products List and Qualified Manufacturers List Program, Project No. D200IPT-0023.001, dated February 1, 2002

The Defense Logistics Agency partially concurs with all recommendations in the subject draft report on Defense Supply Center Columbus (DSCC), and proposes to take corrective measures as stated in Attachment 1. General comments to the draft report's conclusion concerning the effective implementation of the Department of Defense (DoD) Qualified Products List (QPL) and Qualified Manufacturers List (QML) Program at DSCC are also included in Attachment 1. Specific comments regarding the factual accuracy of certain parts of the draft report is in Attachment 2.

The DoD QPL/QML Program is important to the fulfillment of DLA's mission. The program helps increase the assurance that the warfighters receive quality parts. We appreciate the opportunity to comment on the draft report. Questions may be referred to Mr. William Lee, Technical and Quality Policy Division, (703) 767-1641; or Ms. Annell Williams, Internal Review office, (703) 767-6274.

> HAWTHORNE L. PROCTOR Major General, USA

Director

**Logistics Operations** 

Attachments **DLA Comments** 

# DRAFT EVALUATION REPORT OF THE DEFENSE SUPPLY CENTER COLUMBUS QUALIFIED MANUFACTURERS LIST and QUALIFIED PRODUCTS LIST PROGRAM (PROJECT NO. D200IPT-0023.001, dated February 1, 2002)

#### General Comments:

The Defense Logistics Agency (DLA) partially concurs with the findings in the subject report. However, we do not concur with the statement in the executive summary of the report: "DSCC did not have an effective manufacturing and product qualification program: ..."Three reasons were stated for this concluding statement: (1) DSCC did not fully enforce the certification and retention of qualification policy, (2) DSCC did not receive 1,739 Product Quality Deficiency Reports (PQDRs) for review, and (3) DSCC could not trace sources and authenticity of their products because they did not receive 6,479 Certificates of Conformances Traceability (COCTs). In order to discuss and clarify these issues, the following policy requirements need to be defined:

Retention of Qualification: A set of detailed technical requirements in the specification that have been developed and coordinated with the military services for maintaining manufacturers on a Qualified Manufacturers List and Qualified Products List (QML/QPL) for a particular technology area. The requirements are designed to assure continuous product performance, quality and reliability. The retention of qualification requirements may include such things as product failure reports, annual production and testing reports, critical design and process/material changes notices, etc. The retention requirements can be used to accomplish the certification of qualification status.

Validation: The process by which the Preparing Activity reviews the specifications having requirements for qualification every two years to determine the need to continue qualification requirement.

Certification of Qualification Status: This is accomplished during the above two-year to validation review to determine if a manufacturer is still a valid source of supply in order be retained on the QML/QPL. The certification is used when the applicable specification does not contain retention of qualification.

Facility Audits: The requirement for a facility or plant site audit is specified in the applicable military specification and in paragraph AP2.5.5 of DoD 4120.24-M, Defense Standardization Program Policies and Procedures. Typically, the audit requirement is necessary for complex and critical product types used in weapon platforms. The audit requirement normally includes a review of the suppliers' inspection systems, quality and reliability assurance programs, processes and materials, test equipment, test procedures, training programs, product traceability, etc. The audits help mitigate the risk of nonconforming products, and assure compliance to the military specification requirements as well as to the manufacturers' internal processing requirements for these complex and critical components destined for military applications. Audits basically fall under three broad

categories, (1) an initial (first-time) audit that is needed to determine whether a new competitive source of supply can be qualified, (2) a problem/fraud audit that is unplanned but necessary to resolve special technical or non-compliance issues that arise, and (3) a periodic re-audit that is specified in the applicable military specification in order to assure continuous compliance with the military performance, quality and reliability requirements.

DSCC is assigned responsibility to administer 232 QPLs and four QMLs. The validation, and certifications of qualification status are implemented at DSCC through the detailed retention of qualification requirements that are delineated in the applicable specifications. When the certifications/validations are performed, their completion dates are shown on the QMLs/QPLs. The QMLs/QPLs are then accordingly revised and posted on the Department of Defense (DoD) Acquisition Streamline and Standardization Information System (ASSIST) database. To this end, the ASSIST will show that DSCC has properly maintained the two-year certification/validation reviews required by policy.

In fact, DSCC engineers/technicians perform a host of required retention of qualification actions necessary to properly and effectively maintain the Product Qualification Program. These actions are delineated in the applicable military specifications, SD-6 (Provisions Governing Qualification), and DoD policy (DoD 4120.24-M). Some of the following actions implemented at DSCC are:

- 1. Initial Plant Product Qualification Audits
- 2. Engineering Evaluation of Authorizations to Test
- 3. Engineering Evaluation of Product Qualification Data
- 4. Product Design/Process Change Control Evaluations
- 5. Review Annual Retention (Production) of Qualification Reports
- 6. Periodic Certification of the Qualification and Manufacturers
- 7. Periodic Product Qualifications Plant Re-audits

To quantify the technical actions during the last Calendar Year (CY), DSCC reviewed 329 Product Qualification Reports and 5,330 Product Design/Process Change Reports in order to maintain proper configuration control on the product, and evaluated 632 Annual Retention Reports last year in order to maintain manufacturers and their product listings on the applicable QML/QPL.

We do understand the importance of conducting facility audits. The audits as delineated in the specification substantiate the retention of qualification requirements, and is independent of the "certification" of manufacturers to remain on the QML/QPL. Currently, DSCC schedules and conducts their facility (plant) audits within resource allocations and established priorities as follows:

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Priority 1 - Problem/Fraud Audits

Priority 2 - Initial Audits for High-Reliability specifications

Priority 3 - Other initial audits

Priority 4 - Periodic re-audits for High-Reliability specifications

Priority 5 - Other periodic re-audits

Priority 6 - Conventional audits (scheduled when auditors are in the area)

In addition, they have implemented many new initiatives to further augment their audit program and to minimize any risk to the military services or industrial market place when facility audit cycles are adjusted. DoD policy does not allow the Qualifying Activity (QA) (DSCC in this case) to remove a manufacturer and their products from a QML/QPL solely because the QA did not perform a facility audit.

We also would like to point out that two of the audit findings, i.e. regarding PQDRs and COCTs, are not specific requirements for a product qualification program per se but rather are provisions whereby the QML/QPL manager, if provided with such information, could help DSCC or other buying activities in obtaining authentic QML/QPL products and resolving quality issues.

We believe the effectiveness of the QML/QPL Program should be based on how well the QML/QPL requirements facilitate the procurement process by qualifying parts and/or manufacturers in advance of actual procurements or contracts, thereby avoiding delays during the procurement processes while reducing the need for other duplicative contract provisions.

#### Specific comments on the recommendations:

Recommendation No. 1: Fully implement the procedures specified in DoD Manual 4120.24-M, "Defense Standardization Program (DSP) Policies and Procedures," March 2000, for Qualified Products List and Qualified Manufacturers List Programs, to either recertify the manufacturer within the required cycle or remove the manufacturer from the Qualified Products List and Qualified Manufacturers List Program.

#### **DLA COMMENT:** Partially Concur.

DoD policy delineates conditions for removal of QML/QPL sources, none of which include a provision for a QA to remove manufacturers from a QML/QPL solely because the QA did not perform a facility (plant) audit, nor "recertify" the manufacturer within the required cycle.

As indicated in our general comments, DSCC performs all the elements necessary to "recertify" that the manufacturers can be retained on the QML/QPL. DSCC performs the certification of a manufacturer as part of the retention of qualification requirements specified in our military specifications. DoD 4120.24-M permits this. When the QA completes the certification review of all of the manufacturers on the QML/QPL, the QML/QPL is then revised and posted on the ASSIST. The ASSIST database will show that DSCC has properly maintained the two-year certification/validation reviews required by policy.

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The requirement to perform facility audits in conjunction with the retention of qualification is only one element within DSCC's overall QML/QPL Program that assures compliance to the military specification requirements. Although audits are specified in the applicable military specifications, they are not a prerequisite for the certification of manufacturers to remain on the QML/QPL.

In terms of performing the specified audits of the manufacturers, we acknowledge that qualification audits are important tools to mitigate quality problems and assure continued product performance, quality and reliability. DSCC plans their product qualification audits within resource allocations based upon the prioritization criteria, stated earlier, and manage risk through adjustments of the audit cycles. However, DSCC, like all agencies, has resource constraints that must be managed. DSCC had to adjust their resources accordingly with their needs as an Inventory Control Point (ICP).

#### Disposition:

- (X) Action is ongoing. Engineering resources will be continually reviewed. See Recommendation No. 4. ECD: 90 days.
- ( ) Action is considered complete.

Recommendation No. 2: Provide Product Quality Deficiency Reports information to the Qualified Products List managers at the Defense Supply Center, Columbus, the Defense Logistics Agency, and Military Departments to update the Qualified Products List.

#### **DLA Comments:** Partially Concur.

This finding is not a specific requirement of the QML/QPL Program. However, we do believe that the PQDR feedback to the QML/QPL manager adds value to the QML/QPL Programs. This information can provide additional data to be used to adjust the audit intervals. More importantly, the PQDR feedback will help the ICP increase the in leverage in obtaining remedial action for defective parts sold to us by suppliers. As indicated in the draft audit report, DSCC has policy memorandum (IPM 97-0048, dated May 13, 1998), which requires the Quality Assurance Specialist (QAS) in the buying directorates to provide the QML/QPL managers all PQDRs involving QML/QPL product. The DoDIG draft report finding on PQDR feedback was confirmed in a DSCC Internal Review audit review report (DSCC-DI 19-01 report dated, November 16, 2001). Corrective actions are underway to strengthen this area. The details of the corrective actions are:

In November 2001, the DSCC Policy and Plans Division (DSCC-BDT) began sending a list of opened/closed PQDRs on QML/QPL items with its associated National Stock Numbers (NSNs) grouped by Federal Stock Classes (FSCs) to the QA. The list is then distributed to the QA Team Chiefs responsible for the affected QML/QPL items. The QML/QPL engineers then research the PQDR to determine whether the affected QML/QPL part has defects that

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would warrant actions against the QML/QPL manufacturer or distributor. If warranted, the engineer will take actions to stop a company's QML/QPL shipments of the affected product, issue problem reports (GIDEP Alerts), and/or remove the company from the QML/QPL. The QML/QPL engineers will also work with the QAS to help in obtaining remedial consideration for defective parts (e.g. replace defected parts). The PQDR data is then input to the master DSCC QML/QPL database for future reference and determination of whether a negative trend is developing with a particular supplier.

#### Disposition:

- (X) Action is ongoing. DSCC Internal Review (DSCC-DI) will conduct periodic reviews to assure compliance to policy memorandum IPM-97-0048. ECD: By the end of CY 2002.
- ( ) Action is considered complete.

Recommendation No. 3: Provide Certificate of Conformance and Traceability information to the Qualified Products List managers at the Defense Supply Center Columbus, the Defense Logistics Agency, and Military Departments to determine authenticity of a product.

#### **DLA Comments:** Partially Concur.

This finding is not a specific requirement of the QML/QPL Program per se. Rather, the COCT is a requirement in several military high reliability specifications to help ensure that authentic QML/QPL parts are received when ordered. Verification that COCTs are received is a contractual matter, which resides in the DSCC buying directorates. The QA at DSCC helps ascertain the authenticity of the product source, and its products. The QA expertise has helped DSCC recover roughly \$190 million from fraud investigations during the past 12 years.

We do concur that DSCC must receive COCTs whenever they are specified in a requirement document (i.e., military specification), and invoked in the contract. The QA at DSCC was in the process of taking corrective action before the DoDIG review. Soon after the DoDIG review, DSCC Internal Review office investigated the finding and ascertained the problem to only MIL-PRF-19500 semiconductor products. As the result the DSCC Internal Review audit review (DSCC-DI report 19-01, dated November 16, 2001), the following actions have already been implemented at DSCC to assure the buying directorates receive the COCTs as required:

- 1. A local contract clause (E-25) has been revised to be sure the requirement to submit a COCTs is clear to the suppliers.
- The buying directorates have established a point of contact to track the receipt of the COCTs. The QAS at the buying directorates will review the COCTs for adequacy and correctness.

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- 3. The QML/QPL managers have sent letters to all DSCC suppliers of products requiring COCTs to remind them of the necessity of adhering to the COCT requirements.
- 4. The QML/QPL managers have sent letters to the Quality Assurance Representatives (QARs) at the Defense Contract Management Agency to remind them to check for COCTs on source-inspected parts. The QARs have been encouraged to report any problems to DSCC.
- 5. The E-25 clause was also changed to require the suppliers to provide a copy of the COCT to the QML/QPL managers. This will allow the QML/QPL managers to spot check to make sure we are getting COCTs and that the parts themselves have been qualified.

#### **Disposition:**

- (X) Action is ongoing. DSCC Internal Review (DSCC-DI) will conduct periodic reviews to assure that the COCTs are being received at DSCC. ECD: By the end of CY 2002.
- ( ) Action is considered complete.

<u>Recommendation No. 4</u>: Perform a review of resources required to accomplish the recertification and provide adequate resources to accomplish the mission.

#### **DLA Comments:** Concur.

The qualification process requires a resource commitment to effectively maintain performance, quality and reliability of the QML/QPL products. DSCC is currently reviewing recruitment actions to fill critical engineering vacancies. The DoD QML/QPL Program is important to DLA's mission and assures that the war fighter receives the right item, the right time, the right place, and the right price every time. Every year, there are new sources that have to be audited to determine whether they can be qualified. Furthermore, the QA must address fraud problems, problem sources, and sources that change their manufacturing process, or move their manufacturing facility, which all requires audits. To accomplish this workload, dedicated engineers positions have been assigned. To this end, the program has been taken very seriously at DSCC.

Due to the resource constraints and the DoD imposed resource limits, which face each Agency and Military Department every year, DSCC had to adjust their resources accordingly with the ICP's needs. Consequently, the DSCC QA has to prioritize the periodic product qualification audits, and adjust audit frequencies accordingly. DSCC has implemented changes to several specifications to minimize risk for the military services and the war fighter from receiving poor quality or non-conforming parts.

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Also, improvements in efficiency and effectiveness are possible through increased automation. In December 2000, the DoD Qualification Working Group (QWG) identified several areas where automation would improve processes and use resources more effectively. The Defense Standardization Program Office (DSPO) accepted the QWG recommendation to redesign the qualification lists and related databases and automate the QML/QPL administration process to the degree possible. The redesign will add new automated capabilities that will simplify and streamline the qualification system. DSPO will implement this change over a thirty-month transition period. In fact, DSPO is working with DSCC to model the redesign of their current automated systems, the ASSIST, with DSCC's current QML/QPL database functionalities. DSCC is the only QA within DoD to have a sophisticated database to help manage the QML/QPL Program.

#### **Disposition:**

(X) Action is ongoing. Recruitment actions to fill critical engineering vacancies will be reviewed. ECD: 90 days.

( ) Action is considered complete.

# EVALUATION OF THE DEFENSE SUPPLY CENTER COLUMBUS QUALFIED MANUFACTURERS LIST and QUALIFIED PRODUCTS LIST PROGRAM

DRAFT EVALUATION REPORT (PROJECT NO. D200IPT-0023.001, dated February 1, 2002) **Corrections for Accuracy** Pg i Page i, Executive Summary, Results. First bullet - change "Recertification" to 'Certification". REASON: "Certification" is the terminology used in DoD 4120.24-M, "Defense Standardization Program (DSP) Policies and Procedures," March 2000. 2. Page ii, Executive Summary, Summary of Recommendations. Last sentence: Change Pg ii "recertification" to "certification". REASON: "certification" is the terminology used in DoD 4120.24-M. Pg 2 3. Page 2, Background, QPL Review and Recertification. First sentence: Change "Recertification" to "Certification". REASON: "Certification" is the terminology used in DoD 4120.24-M. Third sentence: Change "preparing activity" to "Qualifying Activity" and "recertifying" to "certify". *REASON*: The Qualifying Activity is responsible for reviewing and certifying each QPL/QML manufacturers on a periodic basis. Fifth sentence: Change "recertification" to "certification". 4. Page 3, Background, QML Review and Recertification. First sentence: Change Pg 3 "Recertification" to "Certification". REASON: "Certification" is the terminology used in DoD 4120.24-M. Delete second sentence, and substitute: "The Preparing Activity must review specifications that require qualification every 2 years to determine the need to continue the qualification requirement." *REASON*: The sentence in the report does not accurately represent the Preparing Activity's role as stated in DoD 4120.24-M. Third sentence: Change "preparing activity" to "Qualifying Activity" and "recertifying" to "certify". REASON: The Qualifying Activity is responsible for reviewing and certifying each QPL/QML manufacturers on a periodic basis. 5. Page 3, Background, QPL and QML Program at Defense Supply Center Columbus. Pg 3 Second paragraph, last sentence: Change "Defense Logistics Agency (DLA) Acquisition Streamline and Standardization Information System (ASSIST)" to "Department of Defense (DoD) Acquisition Streamlining and Standardization Information System (ASSIST)". REASON: (a) The Defense Standardization Program Office under ADUSD for Logistics Plans and Programs manages the ASSIST database, and (b) Correct the spelling of the system name. 6. Page 4, Finding, Retention of Qualification Policy. First and second sentences: Change Pg 5 "Recertification" to "Certification". REASON: "Certification" is the terminology used in DoD 4120.24-M. Second sentence: Delete after "status": "and a review of all specifications". REASON: The sentence in the report does not accurately represent the Qualifying Activity's role as stated in DoD 4120.24.

Final Report Reference	
D 5	
Pg 5	<ol> <li>Page 5, Recertification Process at DSC Columbus. Change the paragraph title to read:         "Certification Process at DSC Columbus". REASON: "Certification" is the terminology         used in DoD 4120.24-M. Fifth sentence: Change "recertified," to "certified," REASON:         "Certified" is the terminology used in DoD 4120.24.</li> </ol>
Pg 6	8. Page 6, Results of Recertification Process at DSC Columbus. Change the paragraph title to read: "Results of Retention of Qualification Process at DSC Columbus". REASON: The title accurately reflects the paragraph discussion. Fifth sentence: Change "recertified" to "certified". REASON: Correction terminology used in DoD 4120.24-M.
Pg 6	9. Page 6, Results of Recertification Assessment. Change the paragraph title to read: "Results of Retention of Qualification Assessment". REASON: The title accurately reflects the paragraph discussion. First paragraph, third sentence: Change "Recertification" to "Certification". Second paragraph, fifth and sixth sentences: Change "recertification to "certification". REASONS: Correction terminology used in DoD 4120.24-M.
Pg 7	10. Page 7, DSC Columbus Sourcing and Qualification Unit Personnel and Workload. Last line: Change "recertification to "certification". REASON: Correction terminology used in DoD 4120.24-M.

# **Evaluation Team Members**

The Audit Followup and Technical Support Directorate, Office of the Assistant Inspector General for Auditing of the Department of Defense, prepared this report. Personnel of the Office of the Inspector General of the Department of Defense, who contributed to the report are listed below.

David A. Brinkman Kenneth H. Stavenjord Jaime A. Bobbio Chandra P. Sankhla Wei K. Chang