

# **Supplier Quality Manual**



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# **1.0 Introduction**

1.1 Our Suppliers	VAC Developments Ltd. recognizes the very important role our suppliers have in the value we offer our customers. As an extension of our own operations, we rely on our suppliers to provide material, products, and services which meet all of the requirements of VAC Developments contracts, applicable specifications, and the quality management requirements outline herein.
1.2 Purpose	This manual applies to all suppliers providing VAC Developments with materials, products, processing and related services, including intra-company suppliers, and when applicable, to supplier sub-tier sources.
1.3 Scope	This Supplier Quality Manual (SQM) constitutes an extension to the contract between the Supplier and VAC Developments covering any products and services as described in the Purchase Order. Supplier's acceptance of the Purchase Order (PO) shall constitute supplier's agreement to the requirements in this document. In the event of any inconsistencies between the PO and the requirements set forth below, the terms and conditions of the PO shall take precedence.
1.4 Requirements	In this manual, the terms "shall", "must" or "will" mean that the described action is mandatory; "should" means that the described action is expected with some flexibility allowed in the method of compliance; and "may" means that the described action is permissible or discretionary.
1.5 Code of Conduct	Suppliers shall ensure operations are being performed in a manner that is appropriate and ethical, and in compliance with the legal, environmental, and social responsibilities. Suppliers shall make certain employees are aware of their contribution to product and service conformity and the importance of ethical behaviour.
1.6 Safety	At no time shall any VAC Developments person be exposed to hazardous materials or unsafe conditions as a result of supplier shipments to VAC Developments, or while visiting supplier's location. For items with inherent hazards, safety notices must be clearly visible. As applicable, documented safety handling and protection information must be provided. Suppliers must follow all relevant Heath, Safety and Environmental regulations, and ensure all proper markings are on containers and proper paperwork is supplied. MSDS sheets should be included in initial shipment and upon request. We reserve the right to refuse any delivery that does not conform to these delivery conditions.

# 2.0 Quality System Requirements

2.1 Suppliers shall maintain a QMS suitable to the products and services provided to VAC Developments that is certified by an accredited third-party certification body to one or more of the following, as applicable:

- ISO9001 Quality Management System Requirements
- AS9100 Quality Management System Requirements (Aerospace)
- AS9120 Quality Management System Requirements (Distributors/Stockists)
- AC7004 Quality Management System Requirements (Nadcap Accreditations)

Suppliers shall comply with the following requirements:

• **Distributors/Stockists** – Shall establish and maintain a QMS that is in compliance with AS9120, AS9100 or ISO9001.



• **Commercial-Off-The-Shelf Suppliers (COTS)** – Suppliers that provide commercial products shall establish a QMS in compliance with ISO9001, or equivalent.

• Manufacturers of Build-to-Print and Supplier-Controlled Designs – Shall establish and maintain QMS that is in compliance with AS9100.

• Special Process suppliers – Shall be NADCAP accredited with QMS in compliance with AS9100 or AC7004.

2.2 Level 1 suppliers are considered to be VAC Developments primary suppliers and will be assessed monthly for performance and provided with an annual scorecard. Level 2 suppliers are considered to be secondary/backup with less frequent use. Both levels can have impact on product quality.

2.3 Level 3 suppliers providing products or services have limited or no impact on quality and may not be required to maintain a QMS certification depending on customer requirements and assessed risk.

2.4 Suppliers shall notify VAC Developments in writing within 48 hours of any changes to QMS, location, or top management including Management Representative.

# **3.0 Supplier Approval Process**

3.1 VAC Developments requires all suppliers that have direct impact on the quality of the product to be approved prior to issuance of contracts or PO's, regardless of approvals by customers or other entities.

3.2 VAC Developments reserves the right to specify or approve sub-tier suppliers contracted by its suppliers for work performed for VAC Developments. This includes but is not limited to manufactured parts, special process, raw material, castings, forgings, assemblies, consumables, material testing services, distributors, and other subcontractors.

3.3 To be set up as an approved VAC Developments supplier, the supplier shall complete the Supplier Questionnaires F-PUR-07 and F-PUR-09, and supply any other documentation requested by VAC Developments. Upon receipt of the required and completed documents a supplier review will be performed and the supplier notified of acceptance designation.

3.4 The supplier approval process may include the following:

a) Supplier Initial Assessment

VAC Developments may request the supplier to provide a copy of its QMS third party certificate and/or complete a self-assessment of its business, QMS and capabilities (i.e., quality, delivery, technology and continual improvement objectives).

b) Documentation Audit

In those cases where a suppliers QMS has not been certified by an accredited certification body, VAC Developments may request a copy of the suppliers quality manual, supporting procedures and internal audit reports to determine if the supplier's QMS meets VAC Developments' requirements.

c) On-Site Assessment

When a supplier is certified to a related standard by an accredited certification body, VAC Developments will not conduct an on-site assessment of the suppliers QMS against the same criteria. However, VAC Developments, and/or its customers, due to product/process complexity may elect to conduct an on-site assessment of a supplier's product or process capabilities. As a result, findings may be issued. These assessments could include:

• QMS – if necessary, as a result of (or in conjunction with) product or process capability assessments, to determine whether the supplier's QMS meets one or more of the applicable standards and is functioning effectively.



- Business and Manufacturing Operations to determine whether the supplier has the financial resources, production capacity, and other business resources needed to fulfill VAC Developments' production volume, needs and continuity.
- Continual Improvement Initiative to determine if the supplier's culture, methods and skills are present to actively pursue continual improvement.
- Technology Assessment to determine whether the supplier has the needed technical resources, including production and inspection equipment.
- Sub-Tier Supplier Control to evaluate the effectiveness of the supplier's sub-tier management processes and ensure that products or services procured from sub-tier sources delivered to VAC Developments conform to all applicable VAC Developments requirements.

3.5 A supplier is approved in accordance with the schedule below. The scope of approval may be limited to a type or level of goods and services or to first article inspection:

<u>Approved</u> - Supplier questionnaire, certifications or on-site audits (as applicable) are approved. <u>Probation</u> - Approval is in process.

<u>Inactive</u> - Approval has lapsed or renewal is on hold due to lack of purchase order activity within last 12 months.

**<u>Disapproved</u>** - Lack of delivered quality, unacceptable performance.

# **4.0 General Requirements**

# 4.1 COMPLIANCE TO CONTRACTUAL REQUIREMENTS

4.1.1 Supplier shall maintain a configuration management system to comply with VAC Developments purchase orders. Supplier shall have defined process to review and incorporate drawings, specifications and supplemental instructions and changes thereto to the extent necessary to ensure that only documents of the revision specified in the VAC Developments P.O are utilized at all levels of the supply chain.

4.1.2 Supplier shall comply with specifications stated on the face of the PO and with applicable engineering drawings, including industry, association, society, statutory, regulatory and Government specifications and standards.

4.1.3 Supplier shall notify the buyer if any revision levels received conflict with the revision level levels on the PO. Unless otherwise specified in the PO, the document revision in effect on the date of issue of the PO applies to the contract.

4.1.3.1 These documents shall be controlled, maintained and issued as the latest revision in effect at the time of the PO unless otherwise stated.

4.1.4 Supplier shall maintain a change control management and verification system for documents and electronic media, including applicable government, association, society, industry and customer provided configuration data.

4.1.5 Neither audit, surveillance, inspection or tests made by VAC Developments, representatives of VAC Developments or its customer(s), at Supplier's facilities, at any sub-tier facilities, or upon receipt at VAC Developments, relieves the supplier of the responsibility to provide acceptable products or services that conform to all contract requirements; nor does it preclude subsequent rejection by VAC Developments or its customers.

4.1.6 Supplier shall comply with all special requirements as defined in Contract, PO or drawing. Key characteristics shall be controlled as per AS9103.



4.1.7 All critical designated parts are identified by the PO or drawing. Supplier shall control all processes as stated in the PO. No deviation from the PO is permitted without written approval from the buyer.

4.1.8 When Vac Developments DPD models/derivatives are used for manufacturing and/or product acceptance, the supplier shall be able to interpret, control and maintain configuration of DPD data.

4.1.9 Suppliers shall contact the VAC Developments Buyer with any clarifications related to the requirements defined in contract, PO, engineering package, this SQM, etc.

#### **4.2 SUBCONTRACT**

Supplier agrees that it will not enter into a subcontract for the procurement of any goods or services included in a PO without prior written consent of VAC Developments.

#### **4.3 CONTROL OF SUB-TIER SUPPLIERS**

4.3.1 Documents provided by VAC Developments to the supplier are solely for the purpose of business with VAC Developments. Proprietary documents may be provided to the Supplier in hard copy, electronic or other media. The Supplier is responsible for controlling and maintaining such documents to preclude improper use, loss, damage, alteration and/or deterioration.

4.3.2 Unless authorized by VAC Developments in writing, the Supplier may not transmit or provide any VAC Developments documents, or copies of such documents, to anyone outside the Supplier's business organization except to a sub-tier source used by the Supplier for performance of work on the VAC Developments contract. The Supplier shall return to VAC Developments, or purge all proprietary documents with the last delivery of products or services on the contract. VAC Developments may request the Supplier to provide objective evidence or certification that proprietary documents have been purged. The Supplier shall flow down this requirement to all sub-tier sources, when such sources will be in receipt of VAC Developments proprietary documents during performance of work for the Supplier.

4.3.3 All special processes must be performed by processors approved by VAC Developments customer.

4.3.4 No material substitutions, omissions or modifications will be allowed without prior written consent of Vac Developments.

4.3.5 The Supplier will assure that all product, services and software procured from, or performed at sub-tier suppliers is in conformance to the requirements of the contract/PO, specifications and this SQM.

4.3.6 Sub-tier requirements for Airbus Canada A220 Components:

4.3.6.1 Suppliers of Airbus Canada A220 components are required to review and comply with requirements of ASQR-4.6, Suppliers Quality Requirements.

4.3.7 Sub-tier requirements for Collins Aerospace Components (Landing Systems):

4.3.7.1 Suppliers of Collins Aerospace components are required to review and comply with requirements of ASQR-01, COL-ASQR-PRO-0003, and LS-SBU-A001-SQM - Supplier Quality Requirements.



4.3.8 Sub-tier requirements for Boeing Components:

4.3.8.1 Suppliers of Boeing components are required to review and comply with the requirements of D6-82479 "Boeing's Quality Management System Requirements for Suppliers".

4.3.8.2 Suppliers of Boeing components are required to review on a monthly basis and conform to the latest revision of Boeing D1-4426 Appendix D "Purchase Order Flow Down Requirements" as applicable.

4.3.9 Sub-tier requirements for Safran Components:

4.3.9.1 Suppliers of Safran components are required to review and comply with requirements of SREQ-SLS-001 – Requirements Applicable to Safran Landing Systems, and GRP-0087 Safran Requirements for External Providers.

4.3.10 Sub-tier requirements for Bombardier:

4.3.10.1 Suppliers of Bombardier components are required to review and comply with requirements of QD 4.6-40, Bombardier Quality Requirements for Suppliers.

#### 4.4 ERROR PROOFING

To the extent possible, the supplier should use error-proofing devices and techniques as a form of process control and improvement, especially for repetitive functions, difficult tasks prone to mistakes, or where the cost of error is high.

#### 4.5 CONTROL OF MONITORING AND MEASURING DEVICES

The supplier shall determine the monitoring and measurement to be undertaken and the monitoring and measuring devices needed to provide evidence of conformity of product to determined requirements. As a minimum, where necessary to ensure valid results, measuring equipment shall:

- a) Be calibrated or verified at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards, where no such standards exist, the basis used for calibration or verification shall be recorded; and
- b) Be identified to enable the calibration status to be determined.

# **4.6 CALIBRATION REQUIREMENTS**

4.6.1 Calibration Suppliers must comply with ISO 17025 (certification), or ISO 10012 (standard). ISO 17025 certification is preferred.

4.6.2 Measurement standard used for calibration or verification shall be traceable to international (SI) or national measurement standards and be supported by certification. Where no such standards exist, the basis for calibration will be defined and documented.

4.6.3 Certificate or record of calibration performed will be maintained. Records will include the following at a minimum:

- Equipment type
- Identification number/control number
- Manufacturer
- Calibration date
- Due date
- Interval
- Range of Measurement
- Standards used/Instructions used



- Acceptance Criteria/Tolerance
- Test Measurement

4.6.4 Record retention shall be minimum 10 years unless otherwise directed.

# **4.7 SHELF-LIFE CONTROL**

4.7.1 With each delivery of materials or products that have limited or specified shelf life, the supplier shall provide data that shows:

- the cure or manufacture date; •
- expiration date or shelf life; •
- lot or batch number, and when applicable any special handling or storage requirements.

4.7.2 Unless otherwise specified by contract, for all shelf life limited materials or products delivered to VAC Developments, the remaining shelf life shall be a minimum of 2/3 of the total life.

# **4.8 INSPECTION**

4.8.1 The supplier is responsible for 100% verified quality for all items delivered to VAC Developments.

4.8.2 The supplier shall establish and maintain documentation for final inspections, testing activities and any in-process inspection deemed necessary in order to verify that the specific requirements are met. The supplier shall work within and inspect to tolerances and limitations specified on the drawings. Final inspection shall include verification of acceptance of all previous inspection activities. All inspection and testing operations must be done by authorized and competent personnel, qualified for the type of inspection and test performed.

# 4.9 SAMPLING

The supplier may use reduced-frequency (sampling) inspection plans only when historical records indicate that a reduction in inspection can be achieved without jeopardizing the level of quality, and only after VAC Developments and its customers approved the sampling plans. The supplier may employ sampling inspection in accordance with nationally accepted or customer required standards, as specified by VAC Developments.

- Sampling may not be used to justify the existence of known defectives or discrepancies in a lot.
- The supplier shall maintain quality records in sufficient detail to establish evidence that any sampling was representative, the required tests and verifications were properly performed, and that only material meeting specified requirements have been accepted for production and delivery to VAC Developments.

# 4.10 NOTIFICATION AND DISPOSITION OF NON-CONFORMING PRODUCT

4.10.1 When any material, product or service applicable to a VAC Developments PO is found or suspected of being defective, the supplier is responsible for notifying within 24 hours the VAC Developments Quality Department in writing providing all relevant information (product identification, non-conformance, quantities affected, serial numbers, delivery details, etc.). Under no circumstances should non-conforming material knowingly be shipped to VAC Developments without prior written permission using VAC Developments form F-QLT-49 Supplier Nonconformance Notification, found at http://www.vacdev.com/links.html. If requested by VAC Developments, the supplier must send samples of such nonconforming items to VAC Developments for evaluation.

4.10.2 When nonconforming product is reported to VAC Developments, by the customer and/or by VAC Developments and it is determined to be the responsibility of the supplier, immediate containment and evaluation of all such product will take place. The supplier will notify VAC Developments within 24 hrs of any additional product impacted by the discovery, or any other parts delivered non-conforming, or suspected of being non-conforming.



4.10.3 All material, products or services shall be received subject to VAC Developments' right of inspection. Any material which fails to meet the PO requirements, or is otherwise defective, or not in accordance with the process specifications, will be held for supplier's action. Upon request, the supplier will be required to sort, rework or replace to resolve the issue. At VAC Developments discretion, whole or partial non-conforming orders may be returned to supplier, reworked or accepted by VAC Developments. Rework charges will be debited from the supplier's invoice. No material so held or returned shall be replaced without a new PO.

4.10.3.1 VAC Developments' inspection may consist of:

- Inspection of products or verification of services upon receipt.
- Review of objective evidence of products and services conformity (certificate of compliance, test reports, etc.)
- Inspection at the supplier's premises.

4.10.4 Non-conformances detected by suppliers will be submitted to VAC Developments for disposition, unless the disposition is scrap or rework to drawing or specification requirements (without changing the manufacturing process for parts with frozen process). Rework is defined as additional operations that are not part of the basic production process flow, which will bring product in full compliance with applicable drawings and specifications. Instructions for rework, including re-inspection requirements, shall be accessible to and utilized by the suppliers appropriate personnel.

# 4.11 PRODUCT SAFETY

Suppliers shall ensure that their employees are aware of their contribution to product safety during the entire product life cycle as appropriate to the materials, products, processing and related services being delivered to VAC Developments.

# 4.12 COUNTERFEIT PARTS/MATERIAL

4.12.1 Suppliers shall plan, implement and control processes to prevent the use of counterfeit parts and materials delivered to VAC Developments (reference AS6174).

4.12.2 When any part or material is found or suspected of being counterfeit after delivery, the supplier is responsible for notifying VAC Developments in writing identifying their findings to facilitate timely reporting to government reporting organizations, industry supported reporting programs, and criminal investigative authorities as applicable. Under no circumstance should counterfeit parts and material be knowingly shipped to VAC Developments. If the counterfeit or suspected parts or material are still at the supplier, it is the suppliers' responsibility quarantine the parts or material and to report the incident.

4.12.3 When counterfeit product delivered by the supplier is reported by VAC Developments, immediate containment and evaluation of all such product will take place at the supplier. The supplier will notify VAC Developments within 24 hrs of any additional product impacted by the discovery, and any other delivered counterfeit parts or material or suspected of being counterfeit.

# **4.13 SUPPLIER CORRECTIVE ACTION**

4.13.1 It is essential that corrective action be immediately taken by the supplier when any non-conformance is identified at VAC Developments or any of its customers. When material or product is reworked at VAC Developments or returned to the supplier for replacement or rework, VAC Developments will send a copy of the Defective Material Report (DMR) to notify the supplier of the incident.

4.13.2 A formal corrective action, External Situation Resolution (ESR) will be initiated and provided to the supplier for immediate action by VAC Developments for repeat or major issues (customer escapes, OTD impact, critical product, etc.). The supplier must return the ESR completed in its entirety within the due date noted on the ESR, including objective



evidence for completed actions. The corrective actions must focus on the process failure(s) that allowed the problem to develop, and not on employee failure.

4.13.3 Upon receipt of the completed ESR, VAC Developments will perform a formal review of the supplier response. ESR responses determined to be adequate will closed. ESR's determined to be inadequate or requiring further action will be returned to the supplier for resolution. Failure to complete or provide adequate resolution to an ESR issue may result in any of the following at the expense of the supplier:

- 100% on-site inspection of all material, product or services being provided for VAC Developments by a VAC Developments representative or a third party.
- Supplier visit and performance evaluation by a VAC Developments representative.
- Related transportation expenses
- A potential change in approval status.
- A meeting held with the supplier's leadership to review the issues.

# 4.14 LIABILITY

4.14.1 VAC Developments may seek to recover from a supplier any costs resulting from a delivery of nonconforming product. This may include:

- In-house sorting, rework and inspection. Charges may be incurred for the amount of time or resources to complete these tasks.
- Administrative costs.
- Charges imposed by our customer, such as warranty claims or costs associated with a recall campaign, including charges from the final customer.
- Any other non-conformance related costs.

4.14.2 An immediate action plan must be developed to prevent further deliveries of nonconforming product. The supplier may be requested to visit VAC Developments or our customer to review its corrective actions.

#### 4.15 RETAINING DOCUMENTED INFORMATION

Suppliers will maintain accurate records, which show conformance requirements are being met. Documented procedures shall be in place defining responsibilities for record control. The supplier shall retain quality records for a time period specified by the VAC Developments contract or related reference documents. Upon request, the supplier shall be capable of retrieving and delivering required legible records to VAC Developments within forty-eight hours from the time of request by VAC Developments. Records shall be destroyed only after receipt of VAC Developments approval.

# 4.16 MATERIAL IDENTIFICATION AND TRACEABILITY

The supplier is required to establish a documented system for the control, identification and traceability of all materials. The inspection and test status of all materials should be easily identifiable by the system, and documentation should include a description of any applicable containment areas and/or devices. Parts or products removed from the normal process flow must be positively segregated and clearly marked per AS/EN9100 requirements.

# 4.17 FOREIGN OBJECT DEBRIS/DAMAGE (FOD) AND PREVENTION PROGRAM

Product suppliers must have a FOD program for the purpose of prevention, detection, and removal of foreign objects. The program should meet the following requirements as applicable:

- FOD prevention must be implemented in all applicable areas and FOD training awareness must be given.
- Parts must be protected from handling damage in all areas; material handling awareness training must be provided to all employees and handling standards documented.
- Supplier must document all FOD incidents and perform root cause analysis.
- Metrics must be documented if FOD incidents occur.
- Internal auditing of FOD prevention in all critical FOD areas must be conducted and documented.



• The Supplier will ensure that product delivered to VAC Developments is controlled in a manner that will prevent FOD from being introduced into the final product.

#### 4.18 CERTIFICATION OF CONFORMANCE/COMPLIANCE

4.18.1 Unless otherwise specified by PO/contract, suppliers must provide adequate certification of conformance (CoC) for each delivery of materials, processes and services specified on the PO. CoC's may be submitted electronically.

4.18.2 Suppliers are responsible for all PO terms and attest for full conformity to PO/contract, i.e. suppliers delivering a product which includes sub -contracted or special processes, all such processes must be indicated on the CoC.

4.18.3 The basic categories of CoC documentation for all products or services are General, Special Process, Raw (Mill) Material, and Age-Sensitive materials.

4.18.4 **General Certificates** - A general certification of compliance, signed by the Quality Manager or designated company officer attesting that all products and/or services delivered are in compliance with all contract requirements. All CoC's must be in the English language.

The CoC shall include:

- a) Supplier name
- b) Part number
- c) Drawing/specification revision
- d) Quantity delivered
- e) Packing list/shipper number (if applicable)

If the supplier delivers raw metallic material, a copy of the original mill certificate (see below) shall be provided.

4.18.5 **Special Process Certificates** - In addition to the general certification, the CoC will contain at a minimum:

- the process(s) performed
- the specification number(s)
- latest specification revision level(s)
- applicable process specifications/controls
- applicable test results
- serial numbers, if applicable
- heat lot number, if applicable

If the job was processed using a NADCAP accredited process, the supplier shall include their accreditation number and expiration date.

4.18.6 **Raw Material (Mill) Certificates** – Delivery of raw metallic materials (including forgings and castings) shall include a copy of the original mill certificate or material test report (certification) from a test lab acceptable to VAC Developments.

Raw material mill certifications may not be altered or have any markings other than check marks from verification of physical and chemical values and/or indication of inspection acceptance. Stamps may be applied by warehouses/distributors to add incidental information such as the VAC Developments PO number, weight shipped, etc.

- Casting and forging suppliers shall also include the physical or mechanical properties with heat treat batchlot numbers.
- When required by contract/PO, certification shall show that all materials comply with all Government requirements including country of origin and country where the material is melted.

At a minimum, all raw material/chemical analysis certifications shall contain the following:

- The name of the company that provided the raw material.
  - Material description, name or designation, including, as applicable, size or weight, alloy, type, class, grade or condition.
  - Lot, batch or heat number.
- The applicable specification and revision to which the material complies.



<u>4.18.6.1 Ferrous and Non-Ferrous Metallic Materials</u> - In addition to the above requirements, when the material provided or used to fabricate products is Ferrous and Non-Ferrous Metallic Material, the raw material certification/chemical analysis shall contain the following:

- Actual test results obtained from the lot or heat of material for chemical composition.
- Actual test results obtained from the lot or heat of material for physical properties as required by the applicable material specification or contract.

<u>4.18.6.2 Non-Metallic Materials</u> - The Test Report, issued by the manufacturer of the material, shall indicate:

- The specification and revision to which the material conforms
- The lot/batch number (if applicable)
- The date manufactured and shelf life/expiration date (if applicable)
- Any other technical data (material test results, composition, chemical or physical properties, etc.) required by the applicable material specification or contract.

<u>4.18.6.3 Country of Melt Requirements</u> - Material certification for metallic (both ferrous and non-ferrous metal/alloy) materials shall explicitly state the country in which the raw material was melted. Alternatively, the supplier's CoC may state the country of melt provided that traceability has been maintained to the mill at which the raw material was melted. Upon request, suppliers who have elected to specify country of melt on their CoC shall produce documentation to substantiate country of melt at no additional cost to VAC Developments, Inc., its subsidiaries or lessees.

#### 4.19 SUPPLIER VALIDATION OF RAW MATERIAL

Unless material is procured directly from VAC Developments, the supplier shall perform & document periodic validation of test results for raw materials per AS/EN9100 requirements.

#### 4.20 FIRST ARTICLE INSPECTION (FAI)

4.20.1 FAI shall be performed and documented in accordance with AS/EN9102. The FAI Report (FAIR) shall be created in the English language.

4.20.2 The following items are required in addition to AS/EN9102:

- A full or partial FAI shall be performed for affected characteristics when any of the following occurs:
  - a) Change in design
  - b) Change in manufacturing source(s), process(es), inspection method(s), location(s) of manufacture, tooling or materials.
  - c) Change in numerical control program or translation to another media.
  - d) Natural or man-made event, which may adversely affect a manufacturing process.
  - e) Lapse in production for two years.
  - f) If required by VAC Dev. (i.e. following an escape).
- A photograph of product part marking representing production marking shall be included within the FAIR.
- The Supplier is responsible for assuring completion of the FAIR for all finished part characteristics generated by sub-tier suppliers.
- VAC Developments may request a complete FAI to be performed in lieu of a partial (delta) FAI.
- In FAI Form 3, Field 14, record FAI Inspection Measuring Equipment used as a media of inspection for each characteristic.

#### 4.21 RIGHT OF ACCESS

Suppliers shall grant VAC Developments, customers of VAC Developments and regulatory authorities' access to supplier's premises or manufacturing facilities, and their sub-tiers. This includes the freedom to witness and audit all phases of fabrication, processing, inspection, testing, storage or goods sold to VAC Developments, pertinent documents



and records related to the contract, subject to any limitations or controls required to ensure compliance. VAC Developments will provide advance notice to the supplier (typically 48 hours minimum).

#### 4.22 PACKAGING

4.22.1 The supplier must plan for adequate packaging designed to prevent product contamination, deterioration or loss and to eliminate shipping damage. As suitable, suppliers should provide expendable packaging or returnable containers provided with sufficient density and protection from any likely damage that may occur. Expendable materials and packaging must meet local and national standards for safe disposal and/or recycling.

4.22.2 It is the responsibility of each supplier to provide any product sold to VAC Developments in suitable packaging.

4.22.3 The criteria to determine suitability include:

- Robustness to ensure integrity
- Compliance with health and safety guidelines
- Compliance to VAC Developments requirements
- Compliance to specification guidelines (where applicable)

4.22.4 FOD (Foreign Object Debris or Damage) proof packaging is required on all shipments to VAC Developments. FOD may include:

- Manufacturing residues (i.e. chips, burrs, solder balls, metal & wire clippings, etc.)
- Airborne fallout (i.e. dust, lint, etc.)

4.22.5 Reusable/ returnable packaging supplied by VAC Developments must be returned with the product and used as intended. Failure to use supplied packaging as intended may result in rejection of product.

# 4.23 DELIVERY

4.23.1 VAC Developments expects suppliers to deliver 100% on time. Suppliers may be required to provide corrective action whenever this requirement is not being met. Suppliers should continually evaluate their production capacities to provide accurate delivery dates. The acceptable time frame for shipments is 10 days early to 0 days late. Supplier should systematically inform VAC Developments of any delay in delivering product, including cause, and provide updated delivery date, as required. Suppliers are responsible for additional transport costs due to delays.

4.23.2 It is the supplier's responsibility to ensure goods are delivered in the quantities specified on VAC Developments PO.

4.23.3 Supplier shall provide a Packing Sheet for each separate shipment that includes as a minimum:

- a) Supplier's name and address
- b) Vac Developments' Purchase Order number, change order number and applicable line item number
- c) Part number and quantity

Foreign Supplier's shall additionally provide:

- a) Custom's Declaration Letter
- b) Declaration of Origin

#### 4.24 EXPORT CONTROL AND GOVERNMENT REGULATIONS

Certain Purchase Contracts issued to Suppliers may relate to the production or procurement of defense articles (export controlled goods) as identified in the International Traffic in Arms Regulation ("ITAR") U.S. Munitions List, or the Canadian Controlled Goods Program ("CGP") Export Control List. The Supplier in possession of export controlled goods is responsible for their compliance with all applicable export controls and government regulations. Suppliers must



maintain current registration with either the Canadian Controlled Goods Program (CGP), if a Canadian supplier, or the Directorate of Defense Trade Controls (DDTC), if a US supplier. Suppliers must notify VAC Developments immediately of any change in their registration status.

#### 4.25 CUSTOMER PROVIDED MATERIAL

4.25.1 When goods are produced buy suppliers in accordance with drawings, tooling, gauges or fixtures provided by VAC Developments, suppliers shall return the same to VAC Developments upon completion or cancellation of the PO.

4.25.2 Designs provided by VAC Developments shall not be used by suppliers in the production of goods for any third party without VAC Developments' written consent. Such designs involve valuable property rights and intellectual proprietary information, and shall be held confidential by suppliers.

4.25.3 Unless otherwise agreed, suppliers shall provide all materials, equipment, tools and facilities required to perform the requirements of the PO as their cost.

4.25.4 VAC Developments provided and/or owned property shall be identified, maintained and inspected regularly for suitability of use. Suppliers shall notify VAC Developments immediately if the property is lost, stolen, or unfit for use for any reason. VAC Developments makes no warranties of any nature with respect to any property or data it may provide to suppliers hereunder.

4.25.5 Unless otherwise specified, suppliers shall be liable for any loss, destruction or damage to property provided by VAC Developments. Supplier shall be responsible for returning property in a suitable for use condition as when received at a time specified in accordance with the provisions of the PO.

# **5.0 Supplier Performance**

5.1 VAC Developments evaluation system uses Quality of Service and On-Time Delivery to develop an overall supplier performance rating. This rating serves as an objective measure to determine whether VAC Developments expectations are being met.

5.2 Suppliers shall maintain satisfactory performance to remain on VAC Developments Approved Supplier List (ASL). Suppliers' performance review and communication:

- a) Suppliers' performance will be reviewed on a monthly basis. Suppliers not meeting performance standards may be asked to complete a corrective action.
- b) All performance scores will be held in the strictest confidence between the supplier and VAC Developments.
- c) Supplier rating will be reassessed annually and a report provided.
- d) VAC Developments may determine to address supplier performance deficiencies by meeting with the supplier's management team, as necessary.

#### 5.3 Self-Evaluation Questionnaire

VAC Developments requires Supplier Self-Evaluation Questionnaires to be completed annually. Failure to complete the questionnaire will result in probationary status and possible removal from the Approved Supplier List.

#### 5.4 Performance Measurement

The suppliers total performance score is comprised of two categories:

- Supplier Quality Performance: *Number of defective parts / total parts received*
- Supplier OTD Performance: *Number of on-time line items / total line items received*



#### 5.5 Initial Supplier Ratings

- A Min 90% Quality and 90% Delivery
- $B-Min\ 85\%$  Quality and 85% Delivery
- $C-Min\ 80\%$  Quality and 80% Delivery
- $D-Under\ 80\%$  Quality or Under 80% Delivery
- 5.5.1 A minimum supplier rating must be maintained as specified:
  - Level 1 supplier A rating
  - Level 1 suppliers with lower ratings may require an improvement plan and may be disapproved for use.
  - The initial supplier ratings may be adjusted based on the historical supplier performance.

5.5.2 VAC Developments may continue to use suppliers who do not maintain minimum supplier ratings based on customer requirements. Such suppliers will be monitored and extra requirements imposed as deemed necessary to maintain quality conformance and OTD. This exemption does not relieve the supplier of the obligation to improve and maintain an acceptable supplier rating, nor does it imply that VAC Developments will continue use of the supplier services if the supplier's rating does not improve by a determined date.