



SUPPLIER QUALITY AND BUSINESS REQUIREMENTS MANUAL

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CVG Supplier Quality and Development Requirements Manual

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FOREWORD

CVG Purchasing’s mission is to provide competitive advantages to our customers by partnering with suppliers capable of delivering high levels of products in terms of Safety, Quality, Delivery, and Cost.

This document defines the systems required of a partner supplier and the expectations regarding quality and delivery performance.

By accepting business awards and CVG Purchase Orders, suppliers are expected to adhere to all applicable requirements within this document and CVG’s Terms & Conditions. This document will not be revised, amended, or exceptions made for any specific suppliers or programs.

To prevent business hold or potential loss of business, suppliers are to sign and return a pdf copy of the Acknowledgement of Receipt form at the end of this document to CVG’s Corporate Purchasing and/or Corporate Supplier Quality group.

GENERAL INFORMATION

Contained herein are references to key documents. For the latest version visit the CVG Website at www.cvgrp.com

For Governance and Policies – Click on the “About Us” link on the website or <https://cvgrp.com/about-us/cvg-policies/>

- Harassment
- Environment and Climate Change
- Quality
- Corporate Governance Guidelines
- Code of Conduct
- Insider Trading
- Conflict Minerals Statement
- Health and Safety
- Human Rights
- Ethics
- Stockholder Rights Plan
- Anti-Corruption
- Clawback Policy

For Supplier reference items: Click on the “Suppliers” link at top of webpage.

- Supplier Quality and Business Requirements Manual
-
- Supplier Packaging and Labeling Requirements Manual
-
- Purchase Order Terms and Conditions
- Problem Control – Plex

For Suppliers for Aerospace (AS 9100) products see P 8.3-02 Supplemental

All requirements and standards stated in this Supplement pertain to the specific requirements of Commercial Vehicle Group, Inc. (“CVG”). All references to Commercial Vehicle Group, Inc. or CVG apply to all CVG facilities (CAB Systems, Seating, Electrical, and Specialty Products). All suppliers of direct materials and products must have in place an appropriately certified Quality Management System as defined in section ‘B’ below.

Other reference books of technical specifications to which suppliers must comply are available through AIAG and include Advanced Product Quality Planning, Failure Mode and Effect Analysis (FMEA), and Control Plan (APQP/CP), Measurement System Analysis (MSA), Fundamental Statistical Process Control (SPC), and Production Part Approval Process (PPAP).

A. Definitions

All statements contained within this document referring to “**supplier**” refer to your company regardless of sourcing arrangements. All statements referring to **subcontractor (or sub-supplier)** refer to providers of materials, parts, or services to the supplier. All statements, which refer to “CORPORATE QUALITY”, shall henceforth refer to CVG - Corporate Supplier Quality Assurance and Development Department.

B. Supplier Quality Management System Requirements

Suppliers to CVG are required to be third party registered, at a minimum, to the latest version of the ISO 9001 quality standard, and ultimately (if eligible), compliant and certified to the latest version of the ISO IATF 16949 quality standard. **For customers that specify IATF 16949 certification for (tier-n) suppliers, CVG would require those suppliers to be certified with IATF 16949 by accredited third-party certification if it is possible.** This requirement applies to every physical manufacturing location of each supplier providing goods and/or services that are present in the final CVG product sold to CVG’s customers. **ISO/IATF standards are available through the AIAG (Automotive Industry Action Group).**

In the case of multiple manufacturing sites, the supplier shall maintain all relevant documentation of certification and provide evidence of such to CVG as requested. All materials must be processed, controlled, inspected, and/or tested in accordance with requirements as presented in the latest version of the ISO 9001 or IATF 16949 standards, this addendum, supply agreements, purchase orders, and any other requirements stated on CVG documents.

C. Supplier Development

In the event that third party registration is an extreme burden to the supplier, a supplier development program may be an alternative under certain conditions. A supplier may apply to the CVG Corporate Quality Group for consideration of the circumstances and the need for the product(s) produced by the supplier.

If it is determined that circumstances warrant a supplier development program, arrangements will be made for a second party evaluation of the ability of the supplier to become compliant to the requirements of ISO 9001. Recommendations will then be made for any corrective actions needed and after they are implemented, a second party compliance certification of the supplier will be required.

PART PRODUCT APPROVAL PROCESS (PPAP)

A. Supplier Sample Submission Procedure

All suppliers shall follow the instructions provided in the latest revision of the AIAG Production Part Approval Process (PPAP) manual or as directed by CVG Supplier Quality or the approving CVG location and use the appropriate AIAG forms when applicable. PPAPs are to be submitted to “**Level 3**” requirements unless otherwise directed in writing.

Note – All elements specified per the AIAG requirements must be completed by the supplier in all cases. The submission level is for what documents are submitted to CVG for review.

For example - Submitting a “Level 4” PSW only, the Supplier is still attesting to the fact that all requirements of the AIAG PPAP are met even though CVG only asked for the Warrant/cover sheet.

B. Deviations

Deviation requests must be submitted to the CVG manufacturing facility and resolved prior to sample submission to obtain full approval. PPAP's submitted under deviation can only be given an interim approval pending resubmission to corrected drawings, tooling, etc.

C. Chemical Suppliers

If applicable, chemical suppliers must submit samples and technical information to CVG Product Engineering Department or as specified on purchase order or another document.

D. Laboratory and Test Analysis

A current laboratory accreditation certificate (per end-customer accreditation policy) must accompany all laboratory analysis reports. The test results must reflect a period not greater than 12 months and indicate laboratory name, address, date, specification number, specification limits, lot number, test results, and a signature of a responsible individual. Lab scope of facility shall be documented. Outside laboratories must be registered to the ISO/IEC 17025:2005 standard.

E. Legislated Requirements

All products supplied to CVG, which are to be installed into a vehicle interior, are subject to FMVSS 302 or other OEM or government/safety regulated requirements. Documentation assuring requirement compliance must be submitted at time of PPAP and at least annual to the Quality departments of the receiving CVG locations. Suppliers are to maintain evidence of meeting these requirements for every lot of material shipped to CVG and be able to provide such evidence within 24hrs of CVG's request.

F. Initial Approval (Assembly or Raw Material)

Once the CVG PPAP Specialist has evaluated the submission, CVG will notify the supplier of the submission status through the warrant. Production shipments are to be initiated only after the receipt of sample approval, receipt of releases, and receipt of instructions from the Purchasing Department.

G. Initial Approval (Tooling)

All tooling suppliers shall complete and submit a Tool Certification at the time of delivery for each tool cavity. Approval will be given after product is PPAP approved by the user plant/OEM.

H. Product Re-certification

Test data. Certification and Certificate of Analysis on product cannot be more than one year old for submission as part of any PPAP submitted.

I. Layout Inspection / Requalification

The supplier must carry out a regular layout inspection in accordance with IATF 16949 at the frequency specified by the customer.

J. IMDS

For automotive customers the supplier must submit and obtain IMDS approval as part of the PPAP process.

STATUTORY AND REGULATORY

A. RoHS, IMDS, and REACH Requirements

Many of CVG's customers and OEM's require compliance with various worldwide directives involving restricted and hazardous materials. Because of this, CVG must also require the same of its supply base. All suppliers should develop procedures, as appropriate and as determined by their position in the supply chain, to move towards RoHS, IMDS, or REACH compliance, or any combination thereof. These requirements are CVG specific for PPAP submissions and must be provided. Please contact your CVG buyer or quality department if you have questions regarding these requirements.

B. Conflict Minerals

In August 2012, the United States Securities and Exchange Commission (the "SEC") published regulations implementing Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Act"). Under Section 1502 of the Act, publicly held companies like CVG, must report annually to the SEC whether they use certain "Conflict Minerals" originating from the Democratic Republic of Congo (DRC) or an adjoining country that are "necessary to the functionality or production" to their products. The "Conflict Minerals" include columbite-tantalite (tantalum), cassiterite (tin), wolframite (tungsten) and gold. This reporting is also a requirement of CVG's customers and is requested throughout the year.

CVG had developed a process that requires all suppliers who provide components and/or materials to any CVG location to provide an updated conflict minerals report for the prior 6-month period. The reporting periods run January through June and July through December. CVG will notify suppliers and request a current version of the Conflict Minerals Reporting Template (CMRT) using the iPCMP tool (iPoint) or by using CVG's dedicated email box at conflictminerals@cvgrp.com.

All suppliers, regardless of location, are required to provide a completed CMRT even if the products or materials provided do not contain any of the conflict minerals. Letters, statements, policies, or other written correspondence will ***not*** be accepted as a response in lieu of the CMRT.

If you are not the manufacturer of the products or materials purchased by CVG or if you are a distributor, you should obtain the information from your supply chain. For components or materials that do contain one or all of the conflict minerals, you are required to provide smelter information. This smelter information should be verified as needed and duplicate information removed.

The CMRT request must be completed by the due date provided. Failure to provide the requested information may affect your ability to obtain future business with CVG.

Additional information and the latest CMRT can be found on the CFSI website at www.conflictreesourcing.org/conflict-minerals-reporting-template/

CVG expects that it will eventually be audited regarding its due diligence efforts to collect this information from its supply chain. The framework for this audit can be found in the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. The OECD framework can be found at: www.oecd.org/investment/guidelinesformultinationalenterprises/46740847.pdf

C. Anti-Slavery and Human Trafficking

CVG will not accept modern slavery or human trafficking in any form or at any place within its business. CVG expects its global partners to adopt the same position and to take affirmative steps to ensure their business operations abide by all ethical sourcing obligations. CVG's suppliers must adhere to all the requirements detailed in the federal acquisition regulations (FAR) and the Transparency in Supply Chains Act for their activities in the United States, and the Modern Slavery Act for their activities in the United Kingdom, and any other law, rule, regulation, order, standard, or other requirement applicable to the individual supplier.

CONTINUOUS IMPROVEMENT

A. Cost Monitoring

Suppliers are expected to cooperate with CVG in an effort to reduce costs and selling price both prior to and during mass production. The supplier must be willing to share suggestions and cost reduction benefits with CVG.

B. VA/VE: Value Analysis/Value Engineering

VA/VE is a systematic problem-solving process that involves identifying the functions of a product, determining the cost of those functions, and providing those functions reliably at the lowest overall cost. VA examines current products in an effort to detect and correct value problems and reduce costs.

VE focuses on new products in an effort to identify and prevent value problems before production. This ensures that cost avoidance is designed into the product. CVG expects its suppliers to participate pro-actively in the VA/VE program when called upon.

DOCUMENT AND DATA CONTROL

Engineering Drawing and Specification Control

Assistance in obtaining part drawings and specifications, clarification of specifications, and information on components can be acquired through the Purchasing Department. Information, as it applies to tooling suppliers, can be obtained through the CVG Product Engineering Department.

DOCUMENT / DATA APPROVAL AND ISSUE

A. Engineering Change

The supplier shall have written authorization from the Purchasing Department prior to making any production/engineering changes. Any product shipped containing deviations without having prior change authorization from the CVG User Plant(s) will be subject to **rejection** and/or **returned** at the suppliers' expense.

B. Engineering Change Notification

In order to prevent any manufacturing problems when engineering changes are communicated directly to the supplier at the request of the OEM/end-customer, component suppliers shall immediately contact CVG Supplier Quality and/or the CVG Plant's Quality department prior to the first revised production shipment. Prior notice shall include change number, lot number, and date of first shipment. The first approved shipment will be identified per the instructions from the specific CVG facility.

PURCHASING

A. Evaluation of Suppliers and Sub-suppliers

CVG reserves the right to visit the supplier's and/or sub-supplier manufacturing facility to verify the quality of purchased parts and to review quality systems at any time. Such assessment could be to update current supplier information, evaluate potential suppliers, or to review systems due to on-going quality related problems, etc. CVG will use the results of these assessments in business partner determination.

B. Run-at-Rates

CVG reserves the right to participate in, or initiate, run-at-rate assessments of the supplier manufacturing capability to meet quoted capacities and quality requirements. These evaluation methods may be requested at the start-up of new programs, during pilot/launch phases, when the product is critical to CVG's production, etc.

C. Potential Suppliers

Prior to the placement of business, potential suppliers will be required to complete a Supplier Self-Assessment and/or Supplier Profile form for submission to CVG Purchasing. **(NOTE: VW and International specific suppliers are required to submit a potential analysis (POT) as a condition of sourcing).**

D. Current Suppliers

The CVG recommends that the supplier be prepared to demonstrate documented evidence of procedures, statistical data, current/historical records, and continuous improvement during on-site evaluation, as well as make available all relevant personnel. The assessment results, as well as other performance indicators, determine the supplier rating and if unacceptable, may affect future business in that they may cause the initiation of "Quotation Probation" and/or the resourcing of business.

E. Systems Improvement

If inadequate systems are evident, the supplier will be required to submit a corrective action plan illustrating targeted activities, timing expectations, and responsible persons. If requested corrective action is not submitted,

the supplier's rating may be decreased. The supplier may be asked to meet with the Supplier Development and/or Purchasing Departments at an appropriate location to resolve performance and/or systems concerns. In addition, the supplier may submit, at any time without CVG request, documentation substantiating system improvements that, upon approval, may increase ratings.

F. Supplier Performance Indicators

All suppliers are evaluated and monitored as appropriate for:

- Reject Parts Per Million (PPM)
 - CVG requirements of "QUALITY" parts per million is "50 PPM."
- Delivery disruption
 - CVG requirements of "DELIVERY" parts per million is "0 PPM"

Other items that may be evaluated as part of Supplier performance are:

- Corrective Action Response
- End-customer assembly plant shutdowns
- Statistical data submissions
- Certification data
- Sample submissions (PPAP)

G. Supplier Escalation

Suppliers that fail to meet the Quality, Delivery or other contractual agreements are subject to three levels of escalation.

1. Non-Conformance Request (NCR) issued via PLEX.
2. Containment Activity Required (Level I, II, III)
3. Business Review Meeting Scheduled

IDENTIFICATION AND TRACEABILITY

Lot Control/Traceability

A lot/batch number shall appear on all labels, and where applicable, on each item shipped, per engineering drawing specifications. Records of lot shipment destination(s) shall be maintained for the life of the program or a minimum of 7 years.

All suppliers shall maintain a lot or batch control and traceability identification system to track all main components, materials, and chemicals to their origin. This system shall also be in effect for any product that has been reworked or repaired. Chemical suppliers shall also maintain proper identification of all pipelines, tankers, control valves, etc.

COUNTERFEIT PRODUCT

All Suppliers must ensure that all product from any source or through any sub-supplier or outside processing is genuine and not counterfeit.

PROCESS CONTROL

Maintaining Process Control - Capability Studies

Where applicable Preliminary process potential study data shall be gathered in rational subgroups and used to develop preliminary control limits, which demonstrate the stability of the process.

Critical characteristics shall be monitored by acceptable techniques of process control monitoring. When out-of-control conditions are observed, component suppliers shall 100% sort or determine capability to the last point in control. Once correction is implemented, samples shall be taken, and results recorded and plotted on the charts.

Chemical suppliers shall concentrate on specification requirements with subsequent attention to Cpk calculations. Chemical suppliers shall conduct statistical studies to evaluate the results of receiving inspection, in-process testing, formula changes, etc. These studies shall be performed on an on-going basis during development and shall include the development of process controls, test methods, and both product and process specifications.

Suppliers providing products with Safety / Critical characteristics must evaluate quality capability of the defined characteristic(s) and provide evidence of process control on a monthly basis or as agreed on with CVG Purchasing.

PROCESS CHANGE

The supplier shall notify CVG Supplier Quality, Purchasing, Materials and Engineering departments of any design, process (including process location), material, or sub-supplier sourcing changes. The supplier shall make notification in writing via email and a written Product/Process change request as directed by the CVG facility. A full PPAP Level 3 (or negotiated PPAP level commensurate with the specific change) will be required unless PPAP is waived in writing by either CVG Supplier Quality or the receiving plant's QA dept.

A. CVG Notification

The supplier shall notify CVG Supplier Quality, Purchasing, Materials and Engineering departments of any design and process changes as indicated below.

B. Process Change Notification Requirements:

- A new or changed product or tooling (specific part, material, color, plating, etc)
- Correction for any previously submitted part.
- Engineering changes to parts or material
- Change in process or process locations even if just relocating within the same building.
- Change in supplier or supplier location (including sub-suppliers)
- Products produced after tooling or supplier location has been inactive for twelve months or more.
- Any change that could affect Safety of product, Fit, Form, Function, Performance, and/or Durability.

VERIFICATION OF JOB SET-UPS

A. First/Last Piece Inspection

When component first piece inspection is used to certify a new set-up, the first piece should be retained throughout the production run and located at the operation whenever possible. It is also recommended that the last piece, once compared to the first piece and accepted, be kept until the next run of that product. Tooling suppliers shall perform 'all piece' inspection, and chemical suppliers shall inspect product(s) during appropriate process intervals.

B. Receiving Inspection and Testing

CVG prefers to keep receiving inspection to a minimum. Therefore, on-line usage of components and chemicals may determine acceptance. With the exception of tooling, all shipments received by CVG shall have been inspected and tested to ensure compliance to specifications and shall include the material certification/warrant documentation. Entire lots of material may be rejected at the first sign of a discrepancy in quality conformance. Chemical suppliers of temperature sensitive products are reminded to provide temperature monitoring devices on each shipment as required.

Third party certification to the latest ISO 9001 or IATF 16949 may be used in lieu of submitting statistical data and material certifications/warrants for component suppliers. However, this does not exempt the supplier from using statistical methods such as a C = 0 sampling plan and maintaining records for review by CVG.

C. Supplier Laboratory Requirements

The supplier shall use a schedule or tracking procedure for tests being performed both internally and externally. When test performance requirements cannot be completed during the shift from which the product was taken, that

product shall be held pending successful test completion. When regulatory control is required by specification, records shall be maintained for review to illustrate compliance. Suppliers using outside laboratories must use laboratories that are accredited laboratories that meet the end-customer requirements. Registration to the ISO/IEC 17025:2005 standard is a requirement.

NON-CONFORMING PRODUCT

CVG Utilizes PLEX Online as its online Corrective Action System. www.plexonline.com

- The Plex Online Problem Control System is used to report Supplier Quality & Delivery Nonconformances and 8D's.
- The system provides a safe collaborative format for CVG and its suppliers to document Quality and Delivery concerns and the supplier's responses.
- CVG's Plex Problem Control module is a standalone system that is not linked to any of CVG's networks and does not link to any supplier networks and requires no download of executable files to access.
- Both CVG and suppliers access the system via the internet portal and suppliers only have visibility to their specific information.
- Suppliers will receive a credential set (User ID and Passcode) for an online portal to the PLEX system.
 - All suppliers shall utilize the PLEX online system to view and respond to corrective actions.
 - All suppliers shall maintain an active portal and load all information needed (8D responses, contacts, certifications, etc..).
- CVG will enter corrective actions via 8D or Cost Recovery form within PLEX.
 - Forms are stored within the system, viewable to both CVG and supplier (via portal).

A. Supplier Tests

Product performance test failure shall be cause for the supplier to quarantine production shipments immediately pending analysis of the process and corrective action. The supplier shall immediately notify each CVG location of the failure, shipment suspension, and suspect lot identification. After the root cause of the failure is determined, corrected, and verified and approval by CVG in writing, the supplier may resume shipments.

B. Non-conforming Product Detection and Reporting – Failure Costs

The supplier shall be debited for any/all product failure costs determined to be the responsibility of the supplier, regardless of if the failure occurred prior to or after shipment to the end-customer. Product nonconformance will be reported through the use of an 8D within PLEX. This form will also be used to inform the supplier of the request to complete a corrective action form for problem resolution outlining containment action and a plan for long term improvement.

Plex Cost Recovery may include the following:

- Administrative fee of up to \$350 USD per incident
- Customer pass-thru charges
- Downtime
- Freight
- Labor
- Material Cost
- Offline
- Rework
- Other cost incurred by CVG or its customers related to supplier nonconformance

C. Non-conforming Product Detection – Notification by Supplier

If shipment of non-conforming or suspected non-conforming product has been detected by the supplier and is in transit or has been delivered to CVG, the supplier shall immediately notify, by phone, the quality department at each CVG receiving location. Corrective action documentation shall be submitted to CVG.

- For all tooling issues, suppliers shall contact the Supplier Quality and Purchasing Department. CVG receiving locations may require tooling suppliers to submit an 8D for problem resolution, with corrective action to be submitted to the Purchasing department.
- For chemical issues, suppliers shall contact CVG location(s)

D. Non-conforming Product Detection – Notification by CVG

If non-conforming product has been detected by CVG, the supplier will be notified via automated email from PLEX Online. The supplier shall, within 24 hours, review the concern and provide authorization for disposition. Disposition timing may be decreased if specified by CVG due to the individual manufacturing schedule requirements. Disposition possibilities include:

- Supplier personnel sort at CVG location
- CVG personnel sort at CVG location
- Destroy and dispose of at CVG location.
- Return product to supplier “freight collect” for credit with replacement product due.
- Third party sorting if deemed necessary by CVG due to quality concerns.

Costs associated with nonconforming product that causes a line interruption or shutdown at CVG or the end-customer will be the responsibility of the supplier.

REVIEW AND DISPOSITION OF NON-CONFORMING PRODUCT

A. Reject Parts Per Million (PPM)

Dividing the number of parts rejected by the number of parts received and multiplying the result by 1,000,000 results in PPM; for example, $5 \div 2,500 \times 1,000,000 = 2,000$ PPM.

Any product which is not within specification (except that product which was received via an approved deviation) will be defined as **REJECTED** and will be assessed as such against the supplier in PPM reporting. Rejected prototype and experimental product (non-production) shall not be assessed as PPM at any time

B. Product Disposition

It is to the supplier’s advantage to visit CVG location for product disposition. This provides the opportunity to view component usage and allows products to remain in the facility for sorting, reworking, or repairing. Upon sorting, products which is found to be within specification and can be used as is will not be assessed against the supplier PPM. If materials are returned, they will be considered non-conforming (rejected). All non-conforming products impact the supplier PPM.

To avoid imminent production shutdown, CVG may perform, at the supplier’s expense, the necessary sorting inspection, and repairing/reworking operations to maintain production.

C. Containment Plan

CVG personnel may place the supplier into containment if they experience repetitive concerns with a supplier, during the first ten percent (10%) of annualized volume produced for a new program, or during pilot/launch phases. Containment will be required when consensus within CVG management determines that current supplier controls are not sufficient to insulate CVG from the receipt of nonconforming parts/material. If this occurs, the supplier will then be notified verbally, followed by an 8D or other written documentation.

CVG personnel at the location experiencing the part/material non-conformance make the determination whether the supplier can effectively correct the situation through the 8D process and/or isolate CVG from the problem. It is CVG’s discretion to determine which and how many characteristics need to be inspected until confidence has been restored. Standard guidelines for implementation of containment may consider the following:

- Repeated defects
- Duration and severity of the problem

- Incapable processes
- Quality problem at CVG facility, end-customer, or in the field
- Inadequate containment and/or resolution of non-conformances via the PSR process

With the exception of tooling suppliers, suppliers shall employ containment plan, which is temporary in nature, as directed by the using facility until process capabilities and process controls have proven effective. Suppliers shall also initiate an internal containment plan in situations which could affect production, e.g., manpower, materials, products, tools, processes, engineering change, etc. The plan shall provide a method to ensure that all defective and suspect defective products do not reach CVG.

ALL costs associated with the supplier being placed on containment, regardless of reason or sourcing arrangement will be at the expense of the supplier.

D. Containment Level

- Level I containment is defined as a redundant inspection process enacted by the supplier's employees at the supplier's location in order to isolate CVG from receipt of nonconforming parts/material. This containment effort is to be conducted in a separate area from production with qualified personnel.
- Level II containment is the same activity but "person(s) performing the sort" is an impartial third party selected by CVG and paid for by the supplier.
- Level III containment is activity required to be performed outside the supplier's facilities at the third party's location or at a facility deemed appropriate by CVG.

E. Removal from Containment

In order to be removed from containment, the supplier must provide the CVG location with a minimum of three (3) defect-free shipments, both at the supplier and at the CVG location, documented proof of a Cpk index higher than 1.33 for related or requested Key Control Item as determined by CVG, an updated control plan addressing the problem, and a completed and approved 8D-response with effective permanent corrective action.

It is the discretion of CVG whether to place a supplier in containment and to determine what should be in containment, and the length of the containment.

Containment is generally for thirty (30) days or three (3) shipments, but may be reduced or lengthened for an undetermined period of time, depending on performance, confidence level, and meeting the criteria for removal which includes the approval by CVG for:

- Sufficient quantities (determined by the receiving CVG location) shipped with zero defects.
- An updated control plan to address the problem.
- Statistical data and/or Cpk and Cp data of 1.33 or > for related or requested characteristics.
- Approved 8Dresponse to ensure permanent corrective action with no recurrence.

The objectives for using a containment plan are to demonstrate a management commitment to proactive containment of all detectable defects, to ensure all processes are capable, and to implement process control. Termination of containment occurs only when CVG notifies the supplier of termination after there is no recurrence of the problem and that the documentation submitted has been accepted.

CORRECTIVE ACTION

A. Problem Solving

Suppliers are required to submit effective corrective action for identified rejections. It is the discretion of the Supplier which methodology to use.

It must be submitted for acceptance to the plant QA group. If rejected, additional actions must be taken and documented.

Corrective Actions must follow the 8D methodology with the following key timing points:

- D3 Initial Containment Response – due within 24 business day hours of notification.
- D5 Corrective Action Response – due within 14 calendar days of notification.

B. Unresolved Quality Concerns – Business Review Meetings

If a supplier has a large quantity of rejections within any given month, as indicated in the Monthly PPM Report, or if a supplier's performance is declining and/or resolution to quality issues is not permanently corrected, the Supplier Development and/or Purchasing department may conduct Business Review Meetings for resolution and address required containment level.

DELIVERY

A. In-Bound Freight

The supplier shall have a program in effect with their suppliers, which allows at any time, for carrier assignment and tracking of in-bound products. The supplier material control activity shall assure raw material and component availability through documented communication between production, manufacturing, and purchasing activities.

B. Out-Bound Freight (non-reject/return material)

Unless otherwise specified, CVG shall be responsible for coordinating the freight carrier and schedule. The supplier is required to use CVG-designated carriers; however, suggestions for improvement may be forwarded to the Materials Department.

C. Physical Condition

All trailers are expected to be clean and in good useable condition. Any trailer damage shall be reported to the carrier prior to loading of product. Upon receipt of load, CVG shall examine trailer and load, and shall report any package or trailer damage to both the carrier and the supplier. Prior to unloading of the material any damage will be recorded and acknowledged by the vehicle driver.

D. Premium Freight

The supplier shall have a system to monitor all premium freight that shall include documentation describing the necessity and authorization for premium freight. The program shall also include a documented program for reduction/elimination of premium freight that includes corrective action and monthly reporting to CVG on the cause of the premium freight and corrective action taken. The supplier is responsible for all premium freight charges and subsequent charges associated with product that is delayed, due to supplier logistical, quality or scheduling problems.

E. Logistical Concerns

Logistic concerns will be reported on the 8D or other appropriate forms and will be assessed against the supplier. Logistical concerns will be assessed against the supplier on the Monthly PPM report.

In concurrence with the above report, suppliers may receive a report detailing a past-due condition. Receipt of this report shall initiate immediate reconciliation of shipment discrepancies through contact with the Materials Manager of the issuing plant.

F. Customer and Production Schedules

The supplier must generate a production schedule that ensures all CVG requirements are met. The supplier shall maintain documentation that shows the correlation between weekly CVG requirements and the production schedule, or as specified by the Just-In-Time (J.I.T.) or Kan-Ban schedule. Suppliers may receive a report detailing a product's past due condition, receipt of which shall initiate immediate reconciliation through contact with the Materials Manager of the issuing CVG facility.

G. Non-Delivery, Delayed Deliveries or Short Shipments

If non-delivery, delayed deliveries, or short shipments are anticipated, **ALL** suppliers shall immediately notify CVG Materials Department of the receiving location. Tooling suppliers shall also contact the CVG Program Manager or Applications Engineer.

H. Interruption/Shutdown

If a CVG location experiences an interruption/shutdown caused by the supplier due to a quality issue, lack of raw materials, etc., CVG will contact the supplier. An 8D or other written document will be issued following the contact. An interruption is defined as individual tools/molds/jobs that had to be turned off or skipped. A shutdown is when the entire line is shutdown. This could occur at CVG, the end-customer or both. Upon notification of the interruption/shutdown, the supplier shall determine appropriate action and advise the CVG location of future actions. The supplier also assumes all subsequent premium freight charges incurred by CVG or end-customer due to the interruption/shutdown.

CONTROL OF QUALITY RECORDS

A. Chemical Suppliers - Record Retention

All chemical suppliers shall retain samples of both incoming raw materials as well as finished product for a minimum time equal to the shelf life of the lot, or six months after the production of the lot. Where actual samples are not possible, e.g., unstable or volatile chemicals, the supplier must maintain records of analysis.

B. Control Characteristics

Characteristics should be mutually agreed upon by CVG and supplier and chosen on the basis of product function, design intent, fit, manufacturing process or other factors that may contribute to an out-of-control condition. CVG Divisions support the use/benefits of statistical techniques (SPC/SQC).

C. Unidentified Key Product/Control Characteristics (KPC/KCCs)

If CVG has not identified key product/control characteristics, the supplier shall choose process and/or product control characteristics that pertain to product manufacturing. It is recommended that product application be discussed with the receiving CVG location(s) Quality Department representative and/or Technology Group for determination of key product/control characteristics affecting manufacturing processes.

CONTROL CHARACTERISTICS

A. Key Product/Control Characteristics (KPC/KCCs)

Key product/control and or Critical/Safety characteristics can be designated on drawings, specifications, supply agreements, and or purchase orders provided by CVG. For The supplier is required to submit statistical evidence that the defined characteristic meets an initial CPK of ≥ 1.67 unless otherwise specified in the customer specific requirements. In the event the CPK value can not be met a deviation must obtained by the end customer.

The supplier must maintain a minimum CPK of ≥ 1.33 on the defined characteristics. If the supplier cannot comply with the process capability CPK ≥ 1.33 or if SPC cannot be used, a 100% inspection must be implemented to ensure the defined product/process characteristics meets the specification. Out-of-Control conditions and processes with less than 1.33 capability must include corrective action.

B. Special Process Requirements

As specified by the Automotive Industry Action Group (AIAG), Suppliers are required to conform with relevant AIAG Special Process documents: (i.e. CQI)

ENVIRONMENTAL GUIDELINES

CVG strives to conduct all of it operations in an environmentally sound manner whereby regulatory requirements of global regions, country, states and provinces, and local requirements become the minimum standards of the

business. Suppliers to CVG of production materials, equipment, services, and consumable goods are expected to follow these same guidelines as their business practices. It is desirable for all suppliers to have an effective management system for environmental improvements.

Areas of environmental concerns for the performance of suppliers' products and services are:

- Evidence that suppliers comply with regulatory requirements of global regions, country, states, provinces, and markets are met (RoHS, IMDS, and/or REACH).
- Non-Use of chemicals or material ingredients in Volvo's black or grey list.

CORPORATE SOCIAL RESPONSIBILITY REQUIREMENTS FOR SUPPLIERS

CVG is committed to ensuring the highest standards of social responsibility throughout its supply chain. The companies we do business with shall provide safe working conditions, treat employees with dignity and respect, and use environmentally responsible manufacturing processes wherever CVG products are made.

WARRANTY GUIDELINES

Supplier warrants that all articles, materials, and work supplied conform to the requirements, specifications, drawings, samples, or other descriptions furnished or adopted by CVG that they are free from all defects in manufacture or design and are of merchantable quality and fit the intended purpose. This warranty coincides with basic and component warranty with OEM and fleet customers as well as extended warranty and will begin with the date that the vehicle is placed into service ("Delivered to the User" date).



SUPPLIER QUALITY AND BUSINESS REQUIREMENTS MANUAL ACKNOWLEDGEMENT OF RECEIPT

Supplier shall return a signed pdf copy of this form, via email, within 1 week of receipt of the Supplier Quality and Business Requirements Manual to CVG Corporate Purchasing or CVG Corporate Supplier Quality.

ACKNOWLEDGEMENT:

As the representative(s) of the supplier listed below, I/we hereby acknowledge receipt and acceptance of the terms outlined in the below listed revision of CVG's Supplier Quality and Business Requirements Manual.

I/we have fully read and understand CVG's Supplier Quality and Business Requirements Manual and have appropriately distributed it within our organization and to sub-tier suppliers as needed. We the supplier, shall make every effort to follow the requirements and expectations outlined by this document.

Supplier to complete the following:

CVG's Supplier Quality and Business Requirements Manual revision level: _____

Supplier Company Name: _____

Supplier Company Address: _____

Supplier Representative(s) Name / Title / Signature / Date:

<u>NAME</u>	<u>TITLE</u>	<u>Signature</u>	<u>Date</u>

Future changes to CVG's Supplier Quality and Business Requirements Manual will require the supplier to review the document and submit another Acknowledgement Form for the new revision.