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# **SUPPLIER QUALITY AND DEVELOPMENT MANUAL**



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## Revision Log

The informatin in this Manual is subject to change without notice, revision levels and history is available for identificatin of latest version.

Revision Level	Revision Date	Revised By	Approved By	Sections Revised
0	05/31/04		Mark Poynton	Initial release
1	12/20/11	Michael Quail		Restructuring of manual and general updating, throughout.



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## 1.0 – Introduction

The **ABC Group Inc. (ABC) founded in 1974** is a Canadian-based Certified Women's Business Enterprise (WBE) and is a world leader in vertically integrated plastic processing, supporting a global organization with locations in North America, South America, Europe, and Asia. ABC Group's core business as an Automotive Tier 1 Supplier in the Design, Development, and production of plastic automotive systems and components for OEM's worldwide.

The Global organization is ranked as the largest Industrial Blow Molder for the automotive industry in North America providing the following manufacturing processes: Blow Molding, Injection Molding, Thermoforming, Sheet Extrusion, Interior/Exterior Painting, and Material Compounding.

The ABC Group operates over twenty (20) manufacturing facilities strategically located throughout the world, to provide direct support and services in close proximity to our global customers. Designed primarily to meet customer and product-specific production and assembly needs, these facilities provide maximum flexibility, efficiency, and responsive just-in-time delivery.

Each plant operates independently, offering comprehensive resources and capabilities that can be dedicated and custom-tailored to meet specialized customer needs and opportunities. Based upon customers' individual product requirements and priorities, The ABC Groups' manufacturing facilities can provide a variety of processing capabilities as mentioned above.

Our corporate offices are located at **2 Norelco Drive, Toronto, Ontario, Canada**. The following support activities are provided; Finance, Purchasing, Logistics, IT, Laboratory, Human Resources and Warranty Review.

ABC Group's activities are divided into seven (7) Business Units: Air Induction Systems, Fluid systems, HVAC Distribution Systems, Interior Systems, Exterior Systems, Flexible Products and Fuel Transfer Products.

To maintain our customers high level of confidence we have committed to produce a quality product that is delivered to them on time. For us to be successful in this endeavour we need the full committed cooperation of our Supplier's and their team members. ABC Group follows important aspects at our manufacturing sites, which include Safety and Environment, Quality, Delivery, total Cost and Human Development. We encourage all suppliers to also follow these principles to ensure a committed supplier base to support our requirements.



## 2.0 – Purpose

The Purpose of this manual is to define for our current and potential new Suppliers ABC Groups expectations and requirements that are the backbone of a long term mutually beneficial and profitable relationship.

Suppliers to ABC Group are expected to implement and maintain a robust Quality Management System which promotes defect free products through prevention, monitoring and continual improvement.

All expectations and requirements are intended to assure safe, reliable products from Suppliers, which meet our customers' expectations for quality, delivery, and price. We are committed to working with our Suppliers to assist in meeting this intent and to provide for continual improvement, emphasizing defect prevention and waste reduction in the supply chain.

ABC Group will assess each Suppliers ability to comply with the requirements contained in this manual and based on the perceived risk assessment may include an on-site audit of the facility by ABC Supplier Quality Assurance (SQA) or plant personnel.

ABC group expects all suppliers to acknowledge and comply with the requirements contained in this manual. Suppliers are encouraged to reply back to the Sign off Documentation located at the end of the Supplier Quality Manual and submit it via e-mail to ABC group Supplier Quality Assurance SQA@abcgrp.com.

Suppliers are also encouraged to visit ABC s website [www.abcgroupinc.com](http://www.abcgroupinc.com) and review a Controlled Copy of this manual for up to date guidelines. Further information is also available by contacting ABC Group's Purchasing Department via e-mail at [purchasing@abcgrp.com](mailto:purchasing@abcgrp.com).

Our full Purchase Order Terms and Conditions (80LEG-D-001) can be found under a separate link as follows on the website [www.abcgroupinc.com/en](http://www.abcgroupinc.com/en).

## 3.0 – Scope

This manual applies to Suppliers who provide production and service materials and components parts directly to ABC Group plants/facilities.



## **4.0 – Definitions and Abbreviations**

ABC: ABC Group Inc. and associated Operations

AAR: Part approval and appearance

AIAG: Automotive Industrial Action Group

APQP: Advanced Product Quality Planning

ASN: Advanced shipping Notification

CAR: Corrective Action Request

CC: Critical Characteristic

CI: Continuous Improvement

COO: Certificate of Origin

FMEA: Failure Mode and Effect Analysis

IMDS: International Material Data System

KC: Key Characteristic

MSA: Measurement System Analysis

MSDS: Material Safety Data Sheet

PO: Purchase Order

PFMEA: Process Failure Mode and Effect Analysis

PPAP: Product Part Approval Process

PTC: Pass Through Characteristic

RPN: Risk priority number as developed in the PFMEA

RFQ: Request for Quotation

SC: Significant Characteristic

SPC: Statistical Process Control

SQN: Supplier Quality Notice

Sub-Contractor/supplier: Tier 2 to ABC Group Inc.

Supplier: Tier 1 to ABC Group Inc.

8D: 8 Discipline problem resolution report



## **5.0 – ABC Group Business Philosophy**

ABC Group’s business philosophy and operational principals are based on a win-win ideology and team approach in all levels of our activities.

ABC Group believes in following the “Principals of Lean Manufacturing” and utilization of “5S – Visual Factory” methods in its operations. Each manufacturing entity strives for excellence in adhering to fundamental process basics in areas of Safety, Environmental, Quality, Human Development, Delivery, and Total Cost. ABC Group values and welcomes every Supplier who is utilizing similar sound operational practices.

At ABC Group, we are committed to our ultimate goal of providing best in class products for the global market. To achieve this goal we strive to reduce the number of incidents and defects to our customers to an absolute minimum. We recognize the significant role our Suppliers play in meeting this goal. ABC Group appreciates Suppliers who can demonstrate their capabilities in meeting our expectations.

### ***5.1 - Code of Conduct***

This ABC Group Supplier Code of Conduct ("Code") formalizes the key principles under which suppliers to ABC Group Inc. and its global subsidiaries ("ABC") are required to operate. In selecting suppliers, ABC Group works hard to choose reputable business partners who are committed to ethical standards and business practices compatible with those of ABC Group.

This Code formalizes ABC Group’s practices and makes clear that, recognizing differences in cultures and legal requirements, we expect that wherever our products and the components that comprise them are produced, they are produced in a manner compatible with the high standards that contribute to the outstanding reputation of ABC Group and our businesses. Suppliers are required to comply with this Code and to have and maintain practices similar to those in the ABC Group Code of Ethics.

This Code applies to all facilities involved in the production of products and components for ABC Group or any of its subsidiaries ("ABC Suppliers").

ABC Group strongly encourages suppliers to exceed the requirements of this Code and promote best practices and continuous improvement throughout their operations. ABC Group Suppliers must operate in full compliance with all applicable laws and regulations of the countries in which they operate, and in full compliance with this Code.

ABC Group Suppliers are expected to take necessary corrective actions to promptly remedy any identified noncompliance. ABC Group reserves the right to terminate its business relationship with any ABC Group Supplier who is unwilling or unable to comply with this Code.”



## 6.0 – Quality Management System

### **6.1 - General Requirements**

A robust Quality Management System is an initial base requirement to become an ABC Group Supplier, it is our expectation the Supplier adopt continuous improvement practices in their organization this should be in the form of annual continuous improvement plans documented and approved by upper management. These plans should provide details such as specific goals, action plans, implementation dates and identify personnel responsible. The status of the plans should be reviewed with management at regular frequencies. As required, ABC may ask to review these plans and actions.

In keeping with a continuous improvement philosophy, ABC's expect Suppliers to adopt a visual business operating system (BOS), which involves all employees in driving continuous improvement activities throughout the organization. It is expected that this measurement based continuous improvement methodology be utilized to prioritize and focus company resources on the most important aspects of the business such as safety, environmental, quality, cost, delivery and human development.

ABC recognizes that adopting Lean Manufacturing Principles is an inherently more cost effective method of managing a business. Preference will be given to Supplier's who adopt these principles at a plant level and company-wide. These programs should include training of all employees to these principles, holding workshops (improvement events), establishing measurable, evaluating and acting on the results, communicating results to all employees and cascading the expectations to tier 3 Supplier's.

ABC Group prefers Suppliers certified to ISO/TS 16949:2009. Suppliers are expected to implement, maintain, and improve their certification to this technical specification with the objective of achieving zero defects and continually striving to improve product quality and delivery.

The majority of ABC operations are also certified to ISO:14001 Environmental standards. We expect all suppliers to follow these guidelines as well.

ABC Group will accept Suppliers registered to ISO9001:2008 with the ability to meet AIAG (Automotive Industry Action Group) latest edition manuals of Core Tools (APQP, PPAP, FMEA, MSA, and SPC), ABC Group specific requirements, and our customers' "Customer Specific Requirements".

Certificates are to be provided to the individual plants placing orders with the individual Suppliers and updated as required.

Calibration and Testing Service Suppliers must be certified to ISO/IEC 17025 by an accredited third party certification body or approved in writing by the OEM.

In the event of changes to the quality management system certification status, ABC Group procurement department is to be notified within five business days.



## ***6.2 - End Customer Expectations***

In the automotive industry today it is necessary for all Supplier's to be familiar with the end customers quality requirements as it is a requirement of ABC Group to cascade these requirements down to our supply base. An example of such a requirement is General Motor's QSB (Quality System Basics) audit where Suppliers and sub-Suppliers of product to GM are expected to conduct this self- audit.

ABC Group expects its Supplier's to be familiar with and implement our end customers' requirements as defined in their "Customer Specific Requirement" publications. This includes but is not limited to annual layout and/or functional testing, adherence to CQI-9 Special Process: Heat Treat System Assessment, CQI-11 Special Process: Plating System Assessment, CQI-12 Special Process: Coating System Assessment, CQI-14 Consumer-Centric Warranty Management, and GM 9999-1:H13 Steel and Heat Treat Certification.



## 7.0 – Supply Chain Management

### **7.1 - Supplier's Selection**

Potential Supplier's go through a selection process and upon approval are listed in the Approved Supplier's List. Sourcing is done from those listed in the Approved Supplier's List and remaining in good standing. An evaluation process is conducted to ensure all Supplier's continue to meet ABC's expectation for quality, delivery, responsiveness, ability to stay current with technology and cost. (add link to sample supplier report)

It is ABC's expectation that Supplier's implement a visual business operating system (BOS) that involves all employees in driving continuous improvement activities through the organization. It is expected that this measurement based continuous improvement methodology be utilized to prioritize and focus company resources on the most important aspects of the business such as safety, environmental, quality, cost, delivery and human development.

ABC recognizes that adopting Lean Manufacturing Principles is an inherently more cost effective method of managing a business. Preference will be given to Supplier's who adopt these principles at a plant level and company- wide. These programs should include training of all employees to these principles, holding workshops (improvement events), establishing measurable, communicating results to all employees, and cascading the expectations to tier 3 Supplier's.

All present and potential suppliers to ABC Group shall be able to demonstrate, with evidence that they have implemented and maintain a Quality Management System that conforms to the requirements detailed in ISO 9001:2008. Third party registration to ISO 9001:2008 (or TS-16949:2009) is required by ABC Group Corporation for automotive Suppliers.

The environment is a priority to ABC Group and therefore Suppliers are encouraged to be certified to ISO 14001 or working toward certification. Further, the Supplier shall be able to demonstrate, upon request, compliance with local, national, and international standards and regulations regarding health, safety, and environmental issues relevant to the Supplier's business.

A Potential Supplier Assessment (PSA) by ABC Group Supplier Quality Assurance may be required prior to the approval of a purchasing agreement. The PSA is structured to evaluate the supplier's QMS conformance to TS 16949, ISO 9001:2008, AIAG requirements, and Customer Specific Requirements. The PSA may contain additional requirements, which will be communicated to the supplier prior to the survey.

Non- automotive suppliers may be required to conduct a self-audit as an interim approval at the discretion of ABC Group Supplier Quality Assurance.

#### *Potential Supplier Risk Assessment Audit (80QPP-F-039)*

The ABC operation buyer will notify the nominated Supplier of a new business award by issuing a Purchase Order for the program. In special circumstances, a letter of intent may be issued and can only be issued by ABC



Group Inc. Corporate Purchasing Department. The Supplier will submit PPAP based on Purchase Order acceptance, other discretionary requirements will be clearly identified as a condition of the Purchase Order.

## **7.2 - Approval**

To be awarded business from ABC a potential new Supplier's is required to enter a competitive bidding process with a lowest Total cost approach. When it becomes evident that business will be awarded to the potential new Supplier's a more in depth analysis is done of the potentials Supplier's ability to meet ABC's requirements for quality, delivery, responsiveness, technology and cost. An onsite audit may be conducted to confirm the potential Supplier's capability and capacity to meet the requirements.

Potential Supplier's will be requested to complete a Supplier Information form and a Supplier's Profile form. Once completed the forms are to be submitted along with copies of quality system certification to:

The appropriate buyers e-mail at the operation and a copy to [puchasing@abcgrp.com](mailto:puchasing@abcgrp.com).

### [Supplier Profile Form \(80SQD-F-006E-C3\)](#)

This form will require to be updated whenever any of the content changes, such as changes of key personnel. In addition the potential Supplier's shall provide in writing a separate list with the names, responsibilities, address, phone numbers and email for those occupying the position of President/Senior Executive, Top Sales Executive, Account Manager, Quality Manager and a primary Program Manager.

## **7.3 - Supplier Development Program**

ABC Group will prioritize Supplier development based on the performance results, associated risks, and criticality of the product and components.

The Supplier development plan can consist of the request for corrective action, scheduled progress report meetings, audits by ABC plant or Corporate SQA and on-site support of quality systems.

Supplier development plans may include support in quality systems, Lean Mfg., six-sigma, team-oriented problems solving, etc.

ABC Group has high expectations of all Suppliers and will seek to work with Suppliers that demonstrate a strong commitment to quality improvement, continuous improvement and cost savings.

## **7.4 - Supplier's Performance Evaluation**

Supplier's performance is evaluated through means of a scorecard issued within 15 days of each quarter end (Jan. 1, April 1, July 1 and Oct.1). Each plant receiving product from a Supplier's submits their evaluation quarterly into the electronic ABC Group system. The scorecard report gives a total based on an evaluation of the performance of the Supplier's in each of the following areas:



- PPM
- Corrective Action Reports
- Delivery – on-time
- Line interruptions
- Logistics issues
- Documentation issues
- PPAP

When there are concerns in the above categories penalty points are applied based on the number of rejected parts or occurrences giving demerit points the total of which is used to calculate the performance score in a percentage form.

Score calculation:  $100 - \left[ \left( \frac{\text{Total Demerits}}{\text{Total Penalty Points}} \right) \times 100 \right]$

**Supplier’s Ratings**

- 100% - 97% = Preferred
- 96% - 90% = Excellent
- 89% - 80% = Acceptable
- 79% - 0% = Unacceptable

Performance is tracked and evaluated on a rolling 4-quarter basis; the report is issued in the month following the last quarter and delivered electronically to the Supplier’s contact on record.

[Supplier Quality Development Report \(QSPF-SQD-003\)](#)

**7.5 - Delivery Expectations**

ABC issues release dates through the “ABC Planning Schedule” it is important to note that these are in-house arrival dates. It is expected that the Suppliers use appropriate lead times to ensure product arrives to schedule.

On time delivery is a key part of meeting our customers’ expectations, the product we receive from our supply base also needs to meet these expectations. Supplier’s delivery performance is calculated through tracking non-compliance to shipping dates, quantities, expedited freight, and ASN’s.

**7.6 - Customer Specific Requirements**

Specific OEM’s Customer Specific Requirements are an integral part of doing business in the automotive industry and are a part of the contract with ABC Group. It is expected that all suppliers become knowledgeable in and practice all applicable OEM’s customer specific requirements.



**Examples are:**

GM QSB audits

CQI-9 Special Process: Heat Treat System Assessment

CQI-11 Special Process: Plating System Assessment

CQI-12 Special Process: Coating System Assessment

CQI-14 Consumer-Centric Warranty Management

GM 9999-1: H13 Steel and Heat Treat Certification

Records retention and Safety component requirements



## **8.0 –Product/Process Development Requirements**

### ***8.1 - General***

ABC Group requires all Suppliers of production, service and prototype parts to follow the guidelines provided in the AIAG Core Tools manuals.

At the launch of any new programs or the changeover of existing parts the Suppliers product and process, development practices are expected to follow the elements as defined in the AIAG APQP (Advanced Product Quality Planning) manual. On any changeover of existing parts, Suppliers are required to do a detailed review of existing parts to fully understand the quality appearance and functionality of the part(s).

When customer directed Suppliers are required to be used, the same level of controls are practiced as would be expected of the regular supply base.

The Supplier shall plan and develop quality systems and manufacturing processes required for product acceptance (PPAP) based on their quote and ABC Groups program timing. Each Supplier shall develop a quality plan that promotes CI in all activities such as quality, cost, and delivery and where appropriate, design and development. Documentation providing evidence of adherence to this plan shall be made available to the Buyer/SQA upon request.

### ***8.2 - Program Development***

At the time of any new job award or the changeover of existing parts a pre-award review will be held with the Supplier's multi-disciplinary APQP team prior to the release of a Purchase Order for materials, products or services related to production, the intent of the meeting will be to ensure the Supplier's has a thorough understanding of the requirements and expectations of the job in addition to ABC understanding the Supplier's capabilities, program risks and limitations.

In all cases, the Suppliers are expected to follow the requirements defined in the end customers "Customer Specific Requirements" publications.

A robust APQP process with strong communication within the Supplier's organization and with ABC personnel is necessary to ensure all timelines, specifications and costs are met. Suppliers may be required to attend and support APQP meetings at ABC or at the end customer's facilities.

Documentation as evidence of adherence to the plan and progress of the program shall be made available to ABC personnel upon request.

Suppliers are responsible for sub-Supplier's program activities and to ensure the relevant documentation is available to support all APQP activities and the PPAP approval process.



Suppliers must have an effective continuous improvement process that reduces the Risk Priority Number (RPN) by operation. An RPN reduction system must be clearly defined with specified values over which action items will be taken.

All production part sample submission shall include all requirements listed in the PPAP manual. Any deviations from these requirements shall only be authorized by ABC Supplier Quality Assurance. The need for an Appearance Approval Report (CFG-1002) and other discretionary requirements will be clearly identified as a condition on the Purchase Order.

All PPAP submissions are to be in electronic media.

### **8.3 - Special Characteristics**

Product is designated with special characteristics because variation is likely to significantly affect customer satisfaction with product fit, form, or function. These designations are defined by ABC Group or our customer and listed on the design record. These characteristics shall be identified on all PFMEA's and Control Plans that are developed in accordance with AIAG's, FMEA and APQP manuals. Special characteristics can include product characteristics and process parameters.

Definition of ABC Special Characteristics:

"{SC}" = product characteristic or process parameter with reasonably anticipated variation which affects a product's safety or compliance with regulatory requirements as judged by the ABC internal cross functional APQP team assigned to the project

"[KC]" = product characteristic or process parameter with reasonably anticipated variation which affects a product's fit / function or has need for high visibility as judged by the ABC internal cross functional APQP team assigned to the project.

All {SC} and [KC]'s listed on the design record shall be statistically monitored to prove capability. Process capability must be documented and evaluated. At minimum, the Supplier's shall be familiar with and apply SPC as per the AIAG's SPC manual.

Minimum requirement for short-term capability is Ppk 1.67 and long-term is Cpk 1.33. Items not meeting the above capability criteria shall be 100% inspected until capability is resolved. Test data is to be submitted to the respective ABC plant as required.



#### **8.4 - Error Proofing**

During the APQP process, the Supplier's shall implement all necessary error proofing into the manufacturing process to eliminate or reduce the manufacture of defective product. The error proofing methods and devices shall be recorded in the PFMEA and Control Plans.

Error proofing devices shall be verified with the use of "rabbits" at least once a shift and records kept to ensure the device is continuing to function effectively.

#### **8.5 - PPAP**

All PPAP's are submitted in accordance with AIAG's PPAP manual and the individual customers' Customer Specific Requirements.

Supplier shall submit Level 3 PPAP documentation at a minimum unless otherwise agreed upon in writing from ABC Group Supplier Quality Assurance. Data must be submitted to IMDS database by the Supplier prior to PPAP. All PPAP's are to be submitted electronically.

Suppliers are expected to maintain a record of all PPAP documentation submitted including approved PPAP parts.

[PPAP Review Checklist \(80QPP-F-044\)](#)

The supplier must develop a Safe Launch plan. It must be approved by ABC Group Supplier Quality. ABC Group Supplier Quality may require the continuation and/or modification of Safe launch if defects escape the supplier while Safe Launch is in operation.

#### **8.6 - Containment Requirements (GP12/Safe Launch)**

ABC requires all Suppliers of production parts to utilize a containment program for all pre-production, ramp-up, system fill and for any product manufactures after a shutdown of 5 or more consecutive days. Containment will be kept in place until ABC or the customers exit criteria is met. This means that the Suppliers process is capable of sustained production meeting all contractual requirements.

Acceptable containment processes are those that met the same intent as "GP12" or "Safe Launch".

Data collected from the containment process needs to be made available to ABC personnel as required.

[Supplier Readiness Checklist \(80QPP-F-031\)](#)

[Global Early Production Containment Procedure \(80QPP-D-030\)](#)



### **8.7 - Process and/or Product Changes**

Unapproved changes are not acceptable; they put at risk our processes and those of our customers. Any requested changes shall be initiated with a formal change request to ABC Engineering and ABC procurement personnel followed by a PPAP meeting the conditions required for re-submission as detailed in AIAG's PPAP manual and applicable Customer Specific Requirements.

Any request for changes will be addressed to the respective ABC Engineering representative and ABC procurement personnel. Approvals to a request for change must be obtained before implementing the change. A deviation may be obtained from ABC Engineering in the form of a signed Design or Process Concession. Add link to form.

ABC Group expects its suppliers to verify and document the product dimensional before and after each approved ECR change. They are to communicate any issues or concerns with the design, material, performance, appearance, durability or any other key characteristic based on their expertise, knowledge and lessons learned from similar products.

#### [Supplier Engineering Change Request \(80QPP-F-042\)](#)

Required written approvals and PPAP resubmissions are required for:

- Changes to previously approved materials or sub-Supplier's material changes
- Changes or modification of product specifications.
- Changes to process or method of manufacture
- Changes to the inspection process, methods or equipment.
- Change of sub-suppliers.
- Changes to any inputs supplied by your tiers.
- New start-up after a 12-month decommissioning period (?)
- Transfer of manufacturing location
- Rework processes whether in process or off line.

The Supplier shall be held liable for any cost incurred by the changes made without obtaining a written supplemental Purchase Order or an approved Design or Process Concession. The Suppliers will not be paid for product, tooling, processing equipment, etc. until the change is approved.

The Supplier must notify ABC Group Purchasing if there is a change in program timing and risk to meeting agreed upon tooling completion or PPAP date. Supplier will be required to add additional resources and/or work additional hours (7 days, 24 hours) to ensure date is met.

The Supplier must allow ABC to review product and process development and planning via on-site review and confirmation during development or at any time during part production, if requested.

For changes initiated by ABC or our customers, the ABC procurement department will be the point of contact for formal notification to Suppliers of all drawing/design changes via a purchase order amendment.

#### [Engineering Change Notice \(80ENG-F-15\)](#)

#### [Engineering Change Request \(80-ENG-F-16\)](#)



Safe Launch Process: It is the supplier's responsibility to ensure all production processes are launched in such a manner that they will not adversely impact ABC Group or its customer's production processes to meet timing and quantity. The use of Safe Launch tools such as pre-production product flow diagrams and control plan are a minimum requirement.

### **8.8 - Non-Conforming Product**

When non-conforming product is found in an ABC facility a Supplier Quality Notice (SQN) will be issued to the Supplier.

#### [Supplier Quality Notice \(80QPP-F-034\)](#)

ABC Group requires the Supplier to notify us as soon as non-conforming product is found and if potential similar conditions may exist with product in transit or already at the ABC manufacturing plant location.

When ABC finds supplied product to be non-conforming, the product will be tagged, segregated and the Supplier will be notified for immediate action to be taken by replacing product with certified material, and/or providing on site sort requirements.

In the event that non-conforming material received by ABC Group , the Supplier is required to take immediate containment action in less than 24 hours to isolate ABC from further delivery of defective material. The supplier must provide a detailed problem solving analysis and 8D within 15 days. When required, the specific OEM format will be used to document the permanent corrective action.

Costs incurred by ABC due to poor product quality, non-conforming product, and delivery not meeting contractual requirements may be charged back to Supplier.

ABC expects all Suppliers to deliver material ready for use without the need for incoming inspection. Suppliers are also required to perform annual validation and layouts to ensure product meets all quality, functional and appearance guidelines.

The Supplier is required to account for and document the disposition of all non-conforming material, ABC at its sole discretion, may request formal confirmation/photos of the disposal and/or scrapping of non-conforming or obsolete material.

### **8.9 - Corrective Action**

When corrective actions are required, they will be addressed in the following manner:

- First response within 24 hrs. of receiving SQN using Supplier's corrective action 8D format addressing containment action.
- Full root cause analysis and systemic corrective actions to be submitted within 30 days.
- PFMEA's and Control Plans must be updated to reflect the corrective actions taken.



ABC Corporate SQA or ABC plant may follow up with a visit to verify corrective action implementation.

All corrective action submissions are to be in electronic media.

**8.10 - Quality Rejection Costs**

The following charges may be applied by the respective ABC plant at the time of the occurrence of each quality rejection.

Administration Charge	Minimum \$500 and/or as per OEM charge to ABC Group Plant.
Part Cost	Actual Cost
ABC Line Shut Down	Actual Cost
Customer Line Shut Down	Actual Cost
Lift Truck Usage	Actual Cost
Charges From Our Customer	Actual Cost
Excess Transportation	Actual Cost
Travel and Accommodation Expenses	Actual Cost
Labor Costs	Actual Cost*\$50.00 per hr. (Includes but not limited to, sorting, rework, containment, scrap and set-up.)

\* All above in US dollars

**8.11 - Deviation Request (refer 8.7)**

In the event that a Supplier wishes to submit a request for deviation, the following conditions will be met:

1. Request will be submitted in writing to Plant SQE in writing with a copy to ABC Group Corporate SQA [SQA@abcgrp.com](mailto:SQA@abcgrp.com) in writing.
2. Request is to be submitted with supporting documentation such as statistical, process capability data, testing results and/or drawings.
3. Suppliers may not ship product without deviation approval.
4. Any and all costs associated with the deviation are the responsibility of the Supplier's.

**8.12 - Controlled Shipping**

In the event of continued unacceptable quality or delivery performance, the Supplier will be notified of the necessity to institute controlled shipping on the product. There are two levels of controlled shipping,

Level 1 (CS1) - The Supplier is expected to:

1. Identify the person responsible for the inspection activity
2. Have an area separate and distinct from the manufacturing operations conduct and additional inspection and certification of all product identified by ABC.
3. Specify the identification of certification to be used on the product and containers.
4. Report the type and quantity of defects found in the CS1 activity by the use of I charts, etc. as required.



Level 2 (CS2) – When ABC experiences a reoccurrence of supply problems and action taken to date by the Supplier are insufficient to stop the flow of poor quality the Supplier's will receive a written notification spelling out details of the containment, a confirmation reply form will accompany the letter and a meeting with Supplier's, ABC plant, Corporate SQA, ABC Purchasing Director and/or ABC Corporate Quality Manager to launch the activity.

1. Identify the person responsible to the activity.
2. Retain an independent third party to monitor, measure, inspect and identify all product identified by ABC.
3. Have an area separate and distinct from the manufacturing operations to conduct the agreed upon containment activity.
4. Specify the identification of certification to be used on the product. Containers are to be labeled with a green tag that reads "Containment Process Complete". Each tag must be initialed and dated by the person identified on the confirmation reply.
5. Report the type and quantity of defects found in the CS2 activity.
6. Maintain CS1 activities in addition to CS2.
7. Exit criteria will be specified in the written notification.

Failure to comply with CS2 activities can result in ABC Group, at our discretion, setting up CS2 at our facility and charging it back to the Supplier.

Supplier will be removed from controlled shipping when inspection data shows no defects found for a minimum of 30 days for the specified defect or concern. ABC SQA personnel will review the data, issues, verify corrective action and a potential audit may occur.



## **9.0 – Tooling, Equipment and Gauges**

### **9.1 - ABC Tooling (Molds, Equipment, Gauges and or Other Items)**

Supplier's contracted to design and manufacture tooling, equipment and gauges that are funded by ABC are required to provide a detailed drawing of proposed tooling, equipment and gauge designs to ABC for approval and sign-off prior to commencing work.

Tooling and equipment designs shall adhere to the ABC applicable riders that are supplied with the purchase order. Final tooling, equipment, and gauge detailed drawings must be supplied to ABC in an electronic format such as IGES, Unigraphics, AutoCAD or other agreed upon format.

ABC Group Supplier Quality may, at its discretion, require gauge correlation studies, boundary samples, and detailed measurement process instructions to assure comparable measurement results.

Supplier gauges must be capable of meeting the Measurement System Analysis (MSA) guideline in accordance with AIAG standards and be certified by an accredited body.

### **9.2 - Identification of ABC Owned Tooling**

All ABC Tooling that resides at the Supplier's facility requires a signed Bailee clearly establishing ownership; the signed document shall be forwarded to ABC Group Purchasing Department prior to release of final payment.

[Bailment Agreement \(80QPP-D-022\)](#)

[Bailment Agreement Schedule A \(80QPP-F-023\)](#)

The Supplier's is responsible to protect and safeguard from damage all ABC owned tooling, equipment and gauges. If the property is found to be lost, damaged or otherwise found to be unsuitable for use the Supplier shall immediately report this to ABC buyer.

All tooling and equipment owned by ABC shall be permanently marked so that the ownership of each item is visible and can readily be determined.

The Supplier must have documented process and schedules for Preventive Maintenance. The maintenance schedule must include all ABC or ABC Group customers owned equipment and tooling. Supplier is responsible for identifying and stocking critical spare parts.



## **10.0 – Materials Management**

### **10.1 - Planning Schedules**

Products may be ordered by issuance of a Spot Buy for a specific quantity or through a Blanket Purchase Order supported by Planning Schedules.

[\*Blanket Purchase Order Additional Terms and Conditions \(80QPP-D-033\)\*](#)

Suppliers who have been issued an ABC Blanket Purchase Order will receive Weekly Planning Schedules

Releases will be communicated through a variety of options including FAX, e-mail, or Electronic Data Interchange (EDI). If the release is not received, it is the Supplier's responsibility to notify their designated ABC Material Representative.

[\*EDI Profile \(80QPP-F-037\)\*](#)

[\*Electronic Data Interchange Agreement \(QSPF-EDI-002\)\*](#)

[\*Non-EDI Supplier Agreement \(80QPP-F-032\)\*](#)

### **10.2 - Quantities and Timing**

Deliveries are to be made both in the quantities and at the times specified in ABC's Planning Schedules or as authorized in writing by the designated ABC Material Representative.

All dates specified on the release are arrival dates at our dock.

Time is of the essence. Suppliers who are unable to meet all requirements from ABC for the specified delivery date, quantity, and quality MUST notify ABC's Material representative immediately (no later than 24 hours prior to the designated delivery date). Note that this communication does not alleviate the Supplier of any of the related costs and penalties associated with being past due or shipping defective material. During such delays, ABC may, at its option, buy the goods from other sources and reduce its schedules to Suppliers by such quantities without liability to ABC.

Any excess costs resulting from unauthorized multiple shipments, past due requirements and/or unauthorized truck lines will be debited in full from Supplier's account.

### **10.3 - Documentation**

Products shall not be considered received until ABC receives all required documentation. ABC reserves the right to reject and return such products, at the Supplier's sole expense if documentation is not properly executed.



#### **10.4 - Cumulative Material and Forecasting**

ABC's maximum liability or exposure is limited to 7 weeks cumulative raw material, work-in-process and finished goods. ABC is not responsible for any raw material, work-in-process and/or finished goods in excess of the times stated above unless prior approval has been negotiated. Quantities on the planning schedule beyond the cumulative dates above are for planning purposes only. In the event that additional lead-time is required, the Supplier must obtain prior written approval from ABC Corporate Purchasing.

Forecast information will be supplied to Suppliers through rolling 12-week production releases. Forecast information is provided as an indication of the requirements of ABC, but is not considered binding except as provided in paragraph above.

In order to support changes in production rates, replace failed or damaged product and emergency requirements, Supplier shall establish procedures and maintain adequate product to support ABC's production requirements for 100% on-time delivery. As a minimum, such procedures shall be capable of supporting a 20% volume increase in production within 24 hours of notification.

#### **10.5 - Packaging Requirement**

Packaging will be designed to ensure that the integrity of the product is maintained throughout the supply chain.

Returnable containers are the preferred packaging method if total cost is justified. The containers are to be controlled and returned to the Supplier for reuse.

"Returnable" pertains to Supplier owned or ABC owned containers such as plastic or metal bins, racks, pallets, trays, separators, and/or loose components.

Note: Cleanliness and maintenance are a requirement to ensure no part damage in transit.

All returnable containers and internal dunnage must be pre-approved by ABC. Packaging proposals by the Supplier must be submitted to ABC Corporate Purchasing for approval and be signed-off by an ABC Packaging Engineer prior to implementation.

All products shipped to ABC Group plants shall be clean and free from contamination. Any cleaning chemical, preservative, or lubricant shall be reviewed and approved for use on ABC parts by ABC Group Engineering.

It is the Suppliers responsibility to remove all old labels from returnable containers.

[Supplier Packaging Guidelines \(80QPP-D-040\)](#)

[Supplier Packaging Approval Form \(64P-F-023\)](#)



### **10.6 - Notification of Shipments**

An Advance Shipping Notification (ASN) must be sent to the ABC materials representative within 59 minutes of shipment leaving the Supplier's facility.

In the event of a known shortage or late shipment, the Supplier's shall immediately contact the ABC's materials representative to notify them of the situation. The Supplier's shall also indicate the anticipated time of delivery of expedited material.

Supplier's shall immediately notify ABC of any circumstances that it anticipates may cause a delivery delay, quality concern or otherwise impact the Supplier's performance of its contractual obligations. The notification should include information on the estimated period of delay, the reasons and what is being done to rectify the situation. If requested by ABC the Supplier shall, at Suppliers risk and expense use additional effort, including premium freight such as airfreight or other expedited routing to avoid or minimize delay to the maximum extent possible.

### **10.7 - Identification Labels**

It is an ABC requirement that all inbound shipments be labeled in accordance to AIAG's B10 label (detailed information on this label is available on the AIAG website).

All containers shall have a Production / Service Bar Code Label, affixed to the upper right hand corner of at least two adjacent sides. If the container is returnable, Supplier's shall ensure that old labels are removed and replaced with new ones.

Note: Label must be legible, scannable, and unobstructed from banding or other packaging materials.

All products received by ABC must contain a serial number that is clearly identified on each label and every container. Suppliers can add date codes etc. within their allotted space.

"Mixed Load" labels shall be on all mixed pallet loads and clearly identified. In the event of a mixed pallet, every effort should be made to ensure that the smaller quantity part is loaded as the top layer of the pallet.

All Suppliers supplying materials to ABC, which are considered to be "controlled" under such regulations such as Workplace Hazardous Material Information Systems (W.H.M.I.S.), must be familiar with and comply with all such regulations, for packaging and shipping.

In addition, Supplier must follow all appropriate guidelines and rules relating to the country of receipt.

Material Safety Data Sheets (M.S.D.S.) must accompany all initial shipments and marked to the attention of ABC's Health and Safety Representative at the ABC operation.



The Supplier must provide verification of the composition of the material used and their individual components as well as aspects relating to the environment. Supplier must input the IMDS data into the system prior to delivery of the first samples or PPAP package.

[Supplier Shipping- Parts identification Label Specification \(80QPP-D-038\)](#)

[Sample Label Approval Form \(80QPP-F-041\)](#)



## **11.0 – Logistics**

### ***11.1 - Transportation & Freight:***

Suppliers must use specified transportation methods as indicated on ABC's purchase order and/or accompanying routing letter.

ABC Group Purchasing and Logistics Department must approve any permanent changes to carrier or delivery frequency in writing or via e-mail notification.

All regular freight, payable by ABC (F.O.B. Seller or agreed Inco terms) must be shipped in accordance with ABC purchase order. Non-compliance to these routing instructions will result in debiting back to the Supplier all applicable extra shipping charges. Suppliers are expected to contact the approved carrier to set up pick-ups, unless otherwise advised.

Any Suppliers shipping goods F.O.B. ABC or F.O.B. shipping point freight allowed are responsible for proper coordination of freight to meet ABC's required arrival dates.

[North American General Routing Instructions \(80QPP-F-028\)](#)

[International General Routing Instructions \(80QPP-F-029\)](#)

### ***11.2 - Expedited Freight***

All expedited freight (ground or air) payable by ABC must be authorized in writing or e-mailed by ABC buyer. All invoices for expedited freight must be accompanied with the written authorization to ensure payment. All excess transportation charges, which have been determined to be the Supplier's responsibility, will result in a charge-back.

### ***11.3 - Quantities***

Supplier's must ship parts in pack quantities equal to the material releases and may only ship on their assigned shipping date. Any deviation to this has to be pre-approved. All pick-ups for consolidated runs must adhere to shipping schedules without exception. Any delay in shipping to schedule must be communicated to ABC immediately to avoid downtime issues. Excess freight incurred because of a missed or later pick-up will result in a charge-back to the Supplier's.

### ***11.4 - Timeliness***

It is critical to ABC's operation that shipments leave the Supplier's facility and arrive at ABC on time. Failure to deliver shipments as scheduled may result in charges for ABC production downtime. Suppliers must notify ABC immediately if the selected carrier does not pick up goods as scheduled.



### **11.5 - Special Handling/Hazardous Material**

ABC must be notified prior to shipping any material that requires special handling or bracing or classified as hazardous material.

### **11.6 - Quality/Timeliness Issues**

If past due or defective material is deemed the fault of the Supplier's, the Supplier's shall bear the cost of all excess freight charges required to meet ABC's requirements.

It is Supplier's responsibility to automatically expedite should the Supplier's foresee or incur a past due situation. The Supplier's shall also be liable for all costs associated with downtime of ABC and/or downtime costs billed to ABC by its customer (refer to clause 7.8 for charges).

### **11.7 - Documentation**

The following requirements shall be met:

- A packing slip, and bill of lading shall accompany all product received with a copy of the packing slip affixed visibly on shipment.
- Except damage caused by a vehicle accident in transit, packing and packaging shall be sufficiently robust to protect products from shipping and handling damage, regardless of FOB point agreed.
- A correct bar-code label shall be attached to each package.
- Proper BOL must be used and completed correctly.

### **11.8 - Customs Documentation**

All material shipping cross borders must have "Country of Origin" and "HS Tariff Classification" clearly marked on the commercial invoice along with a written description and value in currency of transaction.

The Supplier's is responsible for accurate completion of customs documents and ensures all documents are given to carrier at time of shipment for proper clearance through ABC's dedicated broker. Any delays in Customs and/or penalties for incomplete or inaccurate information will be the responsibility of the Supplier.

All charges resulting from the export and return of defective product shall be the responsibility of the Supplier.

All Suppliers are obligated to annually provide ABC with all the appropriate Certificates of Origin (COO) to satisfy NAFTA and origin requirements along with a Manufacturer's Affidavit.

Offshore shippers must inform freight forwarder of all information needed to complete the Importer Security Filing form (ISF-10 obtained by contacting the freight forwarder being used) for US customs at time of shipment. Suppliers will be responsible for any costs or penalties relating to Suppliers failing to provide certification or providing fraudulent certification.

It is an expectation of ABC that all Supplier's work towards achieving C-TPAT (Customs Trade Partnership Against Terrorism) and/or PIP (Partners in Protection) certification.



## **12.0 – Additional Requirements**

### ***12.1 - Access***

The Supplier's shall allow ABC Group and their customers' representatives all reasonable access to their premises to:

- Conduct audits as may be necessary to confirm that the quality management system is performing as described in their manual.
- Confirm that product and subcontracted product or services conforms to specified requirements.
- Confirm the ability to sustain the declared production capacity.
- Verify the actions taken following a corrective action.

When circumstance allows the ABC Supplier's Quality Engineer will notify the Supplier's in advance of planned visits.

### ***12.2 - Capacity Improvements***

As part of the Supplier's continuous improvement system ABC expects Supplier's to submit annually evidence of process capability improvements to the attention of the Quality Manager at the respective ABC facility.

### ***12.3 - Confidentiality***

The Supplier's is required to maintain confidentiality of all drawings, specifications, documents, or information provided by ABC in any form or means. All ABC provided documentation to be maintained in a secure environment.

### ***12.4 - Cost Reduction***

Suppliers to ABC Group are expected to achieve a 3% minimum cost reduction annually and will be rated on their participation in this program. Cost reduction plans shall be submitted to the ABC Group buyer at the RFQ stage. The Supplier's will be credited with those cost reduction when plans are approved and implemented.

### ***12.5 - Customer Directed Parts***

All requirements stated in this manual apply equally to Suppliers of customer directed parts.



### ***12.6 - Labor Disputes***

The Supplier will notify ABC in writing at least six (6) months in advance of the expiration of any current labor contract(s). If requested by ABC the Supplier's will have available eight (8) weeks supply of finished goods at least 30 days prior to the expiration of any such labor contract, in quantities and for storage at any place or places designated by ABC at the Suppliers expense.

The Supplier will also notify ABC immediately of any actual or potential labor disputes or disruptions that will delay or threaten to delay timely delivery.

### ***12.7 - Transparency***

Full transparency and accuracy is expected to be practiced by all Suppliers and their representatives when providing ABC Group with information, information could be in the form of documents, sample parts, quality data, tooling data, processing data, run at rates and audit results.

### ***12.8 - Supplier's Competitiveness***

Suppliers agree to support ABC in any joint effort with respect to cost reductions required by ABC's customer. Should the Supplier be unable to support ABC's requirement, ABC reserves the right to competitively bid the products and or services to confirm market price and to award an agreement for those goods and services to the successful bidder. Any Supplier notice of any market movement price increase shall be provided 180 days prior to any increase to be implemented.

### ***12.9 - Warranty***

Suppliers are responsible to become familiar with the end customers warranty policies, as these will be cascaded down the supply chain.

When ABC receives a warranty claims that involves supplied product, it becomes the responsibility of that Supplier to open a corrective action to document the investigation of the cause, testing results, root cause identification and corrective action taken.

The Supplier will be responsible for expenses related to their product that ABC may incur in addressing the warranty claim.

### ***12.10 - Traceability***

Supplier must ensure identification and traceability of products supplied. The identification may include labeling of packaged products, manufacturing location, manufacturing dates; shift, part identification, and sub-contractor traceability (i.e. heat treat, plating, etc. lot details, and traceability.)



### ***12.11 - Training***

Supplier employees must be competent and qualified for their job function. The supplier must ensure this through appropriate internal and external training courses. A training record must be available for all employees producing a product or service for ABC.

### ***12.12 - Contingency Plan***

The supplier must submit a recovery/contingency plan for any quality, delivery, loss, or spill that could affect production flow of material into any ABC assembly facility or any service for ABC Group.



**13.0 – Appendices as Listed in the Manual**

80QPP-F-039	Potential Supplier Risk Assessment Audit .....	p. 7
80SQD-F-006E-C3	Supplier Profile Form .....	p. 8
QSPF-SQD-003	Supplier Quality Development Report .....	p. 9
80QPP-F-044	PPAP Review Checklist .....	p.13
80QPP-F-031	Supplier Readiness Checklist .....	p.13
80QPP-D-030	Global Early Production Containment Procedure .....	p.13
80QPP-F-042	Supplier Engineering Change Request .....	p.14
80-ENG-F-15	Engineering Change Notice .....	p.14
80-ENG-F-16	Engineering Change Request .....	p.14
80QPP-F-034	Supplier Quality Notice .....	p.15
80QPP-D-022	Bailment Agreement .....	p.18
80QPP-F-023	Bailment Agreement Schedule A .....	p.18
80QPP-D-033	Blanket Purchase Order Additional Terms and Conditions .....	p.19
80QPP-F-037	EDI profile .....	p.19
QSPF-EDI-002	Electronic Data Interchange Agreement .....	p.19
80QPP-F-032	Non-EDI Supplier Agreement .....	p.19
80QPP-D-040	ABC Supplier Packaging Guidelines .....	p.20
64P-F-023	Supplier Packaging Approval Form .....	p.20
80QPP-D-038	Supplier Shipping-Parts Identification label Specifications .....	p.22
80QPP-F-041	Sample Label Approval Form .....	p.22
80QPP-F-028	North American General Routing Instructions .....	p.23
80QPP-F-029	International General Routing Instructions .....	p.23
80QPP-F-043	Supplier SQM Signoff Form .....	p.29



## **14.0 – General and Conclusion**

This manual has been put together with the support of critical team members from our Operations and Group Facilities. This Manual's objective is to clearly state our expectations that will support our operations and provide the level of acceptable quality and cost parameters that our customers require of us on a year over year basis. With committed suppliers, we can meet and exceed these targets. We welcome feedback from the Supplier base for ideas that will create continuous improvements. If there are areas where you see we could be doing better please be open with your communications. It is only by truly working together can we achieve more.

ABC group is known as an innovator and leader within its business units. This has provided continued growth and prosperity for us and our Supplier base. We are committed to continue this tradition and working with dedicated and committed suppliers.

Thank you in advance for supporting this very important Supplier Quality manual.

[Supplier SQM Signoff Form \(80QPP-F-043\)](#)

Sincerely,

A handwritten signature in black ink, appearing to read "Michael J.J. Quail".

**Michael J.J. Quail, SCMP  
Director of Purchasing,**

**ABC Group Inc.**