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**REVISIONS**

Document Name: <u>Supplier Quality Manual</u>		Document Number: _____		
Date	Revision	SEC.	Change Description	Revised by
8/23/2012	1	Var.	Initial revision to Lighting requirements	J Evans
8/28/2014	2	Var.	Revisions for clarity; updates to requirements	A Bane
9/28/16	3	Var.	Updates to Sections 3, 5, 6, 10 & 11; addition of 21	A Bane
01/11/17	4	6, 16	Clarify reporting times; Break v/s Clean Points	A Bane
4/17/2018	5	4.10, 3	Updated Damaged freight	M Miracle
4/10/2019	6	16.3	Added escalation procedure	M Selcer
06/07/2019	7	17	Revised 17.1 & 17.2 added 17.3 & QSB required	J Barbrey
9/24/2019	8	Var.	Revised 5, 7, 12, 18, 20, and 21	J Evans

**MESSAGE TO SUPPLIERS**

QUALITY can be simply defined as doing something right the first time. QUALITY is achieved through the continual reduction of variation in product and service required to achieve a degree of excellence that meets or exceeds customer expectations. QUALITY is not a philosophy, statement, or program; QUALITY is a way of life. It is the driving force for achieving total customer satisfaction profitably.

SL cannot achieve QUALITY without the full support, commitment and expertise of our entire supply base. Our company is committed to internal excellence and expects the same from its supply base.

This manual is designed to outline and communicate SL's supplier quality requirements and to ensure a thorough understanding of what is required to become, and remain, an Approved Supplier.

We thank you for your continued support, as well as your commitment to meet our QUALITY objectives.

The undersigned acknowledges having read and understand, and agrees to, the contents of this manual.

**Quality Manager's Name (typed or printed, then signed)**

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**Supplier Name (typed or printed) and today's date**

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## 1.0 INTRODUCTION

SL's Purchasing group is the supplier's first line of communication and permission-granting authority whenever components or services are contracted and provided to the company. The Purchasing group coordinates supplier information and provides the appropriate support activity to the supplier, while relying upon the supplier's expertise with regard to manufacturing and quality of the product.

Suppliers are expected to meet the requirements stated herein. These requirements do not supersede any of the purchase order, engineering drawing or specification requirements, or relieve the supplier of exercising independent expertise and skill in providing products and services to SL.

While various SL activities may assist a supplier in achieving quality requirements and improving quality, **the responsibility for supplier quality remains with the supplier.**

### 1.1 Purpose

This manual is intended to communicate uniform quality requirements which SL expects of all suppliers. It provides general instruction and outlines procedures which are to be followed in order to become, and remain, an Approved Supplier.

### 1.2 Scope

This manual applies to all prototype and production-intent product-related materials (raw materials, processing, components, sub-assemblies, and assemblies) procured by SL.

This manual is a "Quality Standard" and requires the formation and maintenance of a documented, active, and effective Quality System by all suppliers. It establishes specific minimum requirements; it shall be the supplier's responsibility to implement and maintain any additional controls deemed necessary to continually ensure "fitness for use", reliability, and product conformance.

### 1.3 Reference Documents

This Supplier Quality Manual, as well as all referenced procedures and forms, can be found on SL's internet site [www.sl-america.com](http://www.sl-america.com) by following the "Supplier Info" link. Other reference documents are as follows:

- Technical Specification ISO/TS 16949, Automotive Industry Action Group (AIAG)
- Advanced Product Quality Planning & Control Plan (APQP), AIAG
- Measurement Systems Analysis Manual (MSA), AIAG
- Statistical Process Control Manual (SPC), AIAG
- Potential Failure Mode and Effects Analysis (FMEA), AIAG
- Production Part Approval Process (PPAP), AIAG
- Quality System Basics Standards (QSB)

## 2.0 SUPPLIER SELECTION AND APPROVAL

Suppliers are selected and approved by SL per manufacturing location (i.e., approval of one supplier manufacturing facility does not constitute approval of any other facility).

The supplier selection process formally starts within the Purchasing group. On-site supplier assessments are conducted based upon suppliers meeting SL's initial sourcing criteria.

Suppliers will be selected based upon being registered to ISO 9001:2008 or ISO/TS 16949:2009 by an accredited third party certification body prior to being approved for business awards. Any current supplier previously approved by SL is exempt from this requirement. However, all suppliers are encouraged to become ISO certified. Key local suppliers are required to have QSB standards implemented. The AIAG documents listed in 1.3 must be used by all suppliers in establishing their quality program. SL also encourages all suppliers to register to ISO 4001.

## 2.1 Designated Small Suppliers

Suppliers without resources adequate to develop a system according to ISO/TS-16949 or ISO 9001, or who supply non-engineered products, may have specified elements waived by SL. Assessment criteria will be applied to determine applicable provisions, and records of these criteria and the process to decide each provision shall be maintained.

## 2.2 Supplier Assessments

Suppliers achieving an acceptable assessment score and meeting other SL Purchasing criteria (cost, logistics, technology, and commitment) may be added to SL's supplier directory as an approved source. Once a supplier is approved, ongoing supplier ratings (i.e., quality and delivery), cost and other commercial factors will determine long-term business potential. (See section 18.0 for further information on supplier ratings and maintaining Approved status.)

## 3.0 SUPPLIER QUALITY SYSTEM REQUIREMENTS AND ASSESSMENT

### 3.1 On-site Supplier Assessments

SL uses a unique audit format with variable scoring in performing assessments. A successful on-site assessment is required for all new suppliers or new supplier locations prior to sourcing.

Format is available at <http://www.sl-america.com/wp-content/uploads/SL-New-Supplier-Check-Sheet-and-Audit-2014-3.xlsx>. Suppliers with unacceptable survey results are required to submit and complete corrective actions for all observed discrepancies prior to consideration for any sourcing activity. TS standards require SL to perform in-person assessments at least once per year; other assessments will be performed as necessary and as determined by SL.

### 3.2 Supplier Quality System Requirements

Suppliers are required to provide Purchasing a copy of their Quality Manual and/or their Quality System registration certificate before issuance of an RFQ (if not already on file), and to provide updates if/when any changes are made to the certificate (scope, expiration, standards, etc.). If, at any time, a supplier's Quality System registration is allowed to expire, or is rescinded by the registrar, SL's Supplier Quality group must be notified immediately.

ISO/TS16949:2009 and ISO 9001:2008 standards and supplements are available directly from AIAG.

Suppliers must provide a current Organizational Chart indicating Quality personnel functions and reporting relationships along with a Quality Control Procedure Manual. When Quality personnel functions change, updates must be communicated to SL.

### 3.3 CQI Assessments

Suppliers with internal or outsourced special processes as identified by AIAG are required to show conformance with relevant AIAG Special Process documents:

- CQI-9 Heat Treat

- CQI-11 Plating System
- CQI-12 Coating System
- CQI-15 Welding System
- CQI-17 Soldering System
- CQI-23 Molding System

Suppliers are required to use AIAG's assessment forms, and auditors must meet each standard's requirements. At a minimum, auditors must have experience in QMS auditing, plus five years of applicable process knowledge.

CQI assessment submittals are required at time of PPAP submittal, and annually by internal or third-party auditor, including sub-suppliers, as applicable. Any unsatisfactory ratings mandate that the supplier also submit a corrective action plan, plus confirmation that actions have been completed and are effective.

SL requires that all heat treat suppliers follow the heat treating requirements documented on part prints and in any referenced SL, industry, or customer specifications, as well as comply with SL heat treat audit requirements. For parts intended for use by General Motors, all heat treat sources utilized by suppliers and their sub-suppliers shall be approved by GM individually, and must appear on their approval list by time of PPAP submission. Unapproved heat treat sources shall not be used without specific approval of SL via PPAP submission. Annual supplier heat treat self-assessments are to be conducted and provided to SL upon request.

#### **4.0 ADVANCED PRODUCT QUALITY PLANNING (APQP)**

APQP is the process of establishing quality objectives (the voice of the customer) and establishing the schedules or plans for consistently meeting or exceeding these objectives. It is the cornerstone of nonconformance prevention and continual improvement.

APQP and use of SL's Early Supplier Involvement (ESI) methodologies are required in the following situations:

- During the development of new processes and products.
- Prior to significant changes in processes and products (as determined by SL).
- Before tooling is transferred to new producers or new plants.

SL's Purchasing group schedules and facilitates ESI meetings with suppliers, and SL's Quality team will track APQP timing, milestones, and completion with selected suppliers for components as determined during ESI.

Suppliers shall convene cross-functional quality planning teams for every new or changed product. These teams shall use the quality planning techniques identified in the AIAG APQP manual, as well as SL's specific requirements, throughout the process development and pre-production phases.

Typically, the supplier team will include Manufacturing and Quality Engineers, Production, Purchasing, and other personnel as needed. Supplier APQP teams may also request support from SL Purchasing, Quality, Development, and/or Product Engineering personnel.

SL recognizes the AIAG APQP manual as the supplier APQP requirements. Suppliers are required to comply with this manual. The APQP manual is available directly from AIAG. Suppliers are required to adhere to SL-specific requirements in addition to AIAG and ISO/TS-19649 requirements.

#### **4.1 Process Flow Diagram**

Process Flow Diagrams establish and document the relationships between operations and control points of the process. Process Flow Diagrams provide essential information for other quality planning techniques such as the Process FMEA and the Control Plan. Process Flow diagrams are required for PPAP approval and shall be numerically tied to Control Plan and PFMEA operation steps.

**Refer to the AIAG APQP manual for specific details on creating Process Flow Diagrams.**

## 4.2 Failure Mode and Effects Analysis (FMEA)

FMEAs assist in the prevention of nonconforming materials and components through a structured analysis of potential failure modes. FMEAs shall be used in both product design and manufacturing process planning. FMEAs are required for all new or changed products and processes. FMEAs are “living documents” and must be updated for design and process changes, as well as lessons learned throughout the product life.

**FMEAs are used at two distinct times in the product life cycle:**

### 1. Design FMEAs (DFMEA)

DFMEAs are required only if the supplier is involved in the design of the supplied products. DFMEAs are to be initiated by the design-responsible personnel as an integral part of the design and development process. This requirement includes suppliers that develop “black box” and “gray box” designs. In all cases, DFMEAs are to address both the system and component levels.

### 2. Process FMEAs (PFMEA)

PFMEAs identify potential process concerns and the actions taken, and to be taken to prevent them. PFMEAs are to be prepared by the supplier prior to the commencement of tooling. Ideally, a DFMEA should be available prior to the preparation of the PFMEA, however, the DFMEA is not a precondition for the PFMEA, and the lack of a DFMEA should never delay development of a PFMEA.

SL may require preliminary PFMEAs to be submitted in advance of PPAP as part of the APQP process. PFMEAs are required for PPAP approval.

**Refer to the AIAG FMEA manual for specific details on creating FMEAs.**

## 4.3 Control Plans

A Control Plan is a document that summarizes the supplier’s methods to assure continual conformance to drawing, specifications, and SL’s quality requirements, as well as “fitness for use” for a specific part or family of parts. It provides an effective way for suppliers to develop and document quality controls for products and to review changes made after production begins.

Refinements to Control Plans are encouraged as more data about the process becomes available. Changes of significance (form, fit, function, durability, appearance, or level of control) are to be approved by SL via PPAP submission. Changes of no significance (document format, spelling, etc.) do not require SL approval. If there is any question concerning approval requirements, contact SL’s Supplier Quality Engineer (SQE) for direction.

The starting point for a Control Plan is the list of control characteristics. Up to this stage of the quality planning process, the list will have been developed from the following sources:

- Product and process characteristics known to be Significant Characteristics (SC) or Critical Characteristics (CC) by the supplier, based on product and process knowledge, as well as knowledge of customer requirements.
- CCs and SCs identified by SL on engineering drawings and specifications.
- Product and process characteristics identified during APQP and via FMEA.
- Product and process characteristics identified in SL's ESI and APQP meetings.

Once the control characteristics are identified, control methods must be developed and documented in the Control Plan. The goal of control characteristic monitoring is to determine when action is required to maintain process stability and product conformance, and conversely when no action should be taken (avoidance of over-control) when unnecessary actions would destabilize the process.

Control Plans shall detail all process controls from receipt of raw materials through finished product shipment and shall not focus exclusively on CC/SCs. Control Plans shall include provisions to sample product from all streams of production for all control plan characteristics (i.e. multiple out dies, multiple cavity tools, etc.).

All Control Plans must include reference to a minimum annual dimensional layout, functional test, chemical test, and/or material analysis by the supplier. **Control plans submitted without this reference will not be accepted.**

SL-designated CCs and SCs must have SPC control referenced in the control plan, and CCs must have process "mistake-proofing" to further assure 100% quality is received at SL at all times. Mistake-proofing controls shall be referenced in the Control Plan, including the supplier's method of minimum daily verification of the continued function of such controls.

SL may require preliminary Control Plans to be submitted in advance of PPAP as part of the APQP process. Completed Control Plans must be submitted for PPAP approval.

SL relies upon the supplier to be the expert with regard to the manufacturing and quality of the product being purchased. Approval of supplier Control Plans is required to ensure conformance to the AIAG and SL's quality requirements. SL's approval of a supplier's Control Plan is in no way to be interpreted as unconditional approval of the process or the quality of materials/ components produced by the process. The responsibility for supplier quality remains with the supplier at all times.

**Refer to the AIAG APQP manual for specific details on creating control plans.**

#### 4.4 Gaging Requirements

When specified on the SL purchase order, it is the responsibility of the supplier to supply gages for components. This may include gages for supplier and SL use. All gages are to be designed and built per SL's Gage and Fixture Design and Build Standards. SL may also provide gages to suppliers for components at SL's discretion.

Preliminary gage discussion shall begin during the Early Supplier Involvement (ESI) meetings facilitated by SL Purchasing.

#### 4.5 Measurement System Analysis (MSA)

Product and process conformance must be determined by measurements made with appropriate test equipment and gages. The supplier must establish the error of measurement according to specification ratios since the test equipment or gage is a significant part of the



process. Any error in these measurements, whether known or unknown, has a direct bearing on the ability to judge process/product conformance and capability.

SL requires that test equipment and gages used to evaluate any Control Plan characteristic have Gage R&R Studies conducted which meet the requirements of the AIAG MSA Manual; otherwise they must be removed from service and replaced with a conforming gage. Variable gaging shall be used wherever possible. GR&R Studies shall be submitted for all CC/SC gaging for PPAP approval.

**Refer to the AIAG Measurement Systems Analysis (MSA) manual for specific details on conducting GR&R Studies.**

#### 4.6 Statistical Process Control (SPC)

SPC must be used as an integral part of the supplier's process to provide the information necessary for those process parameters and product characteristics, sometimes referred to as Important, Significant and Critical (see Appendix I), that affect the form, fit, function, durability, or appearance of the product. Variables Control Charts are the preferred method of SPC.

Suppliers are expected to utilize data from Control Charts to identify opportunities for continually reducing variation in process output. At a minimum, all SL drawing- and specification-designated CCs and SCs must have ongoing Statistical Controls or mistake-proofing. These controls must be referenced in the supplier's Control Plan. **SL does not consider data logs as an acceptable substitute for Control Charts.**

When unique process conditions, historical data, or other factors suggest an exception to the use of Statistical Controls, supporting rationale must be provided with a proposed Control Plan and Parts Submission Warrant (PSW) to SL's SQE for approval.

**Refer to the AIAG Statistical Process Control (SPC) manual for specific details on appropriate implementation of SPC, as well as available SPC methods.**

Process Performance (Pp/Ppk) studies for all SL-designated CC and SC characteristics must be submitted for PPAP approval. Attribute characteristics require a statement of conformance of a minimum of 300 (or as directed by SL) consecutively passed parts. This equates to a process reliability of 0.99 at 95% confidence and should be so stated in the supplier's PPAP submission.

Process Capability (Cp/Cpk) studies for all SL-designated CC and SC characteristics may be required to be submitted with certification packages for production shipments commencing with Production Validation, or at any time upon request. See Section 6.0 - "Shipment Certification Requirements" for complete instructions.

Minimum acceptable Pp/Ppk and Cp/Cpk indices are detailed in the AIAG PPAP manual. When such indices are below these minimum requirements, reaction conditions specified in the PPAP manual shall be followed. Failure to do so will result in PPAP and/or shipment rejection.

#### 4.7 Lot Size

Supplier lots must be the quantity of product produced under similar conditions, such that the product within the lot is expected to be homogeneous in all significant attributes. Maximum lot size shall be limited as follows:

- One shift of production
- One batch of product produced in a batch process.

**Note: Some processes may require that a lot number change based upon major process changes, set-ups, or adjustments within the material lot; in these cases, the material lot identifier must be readily traceable from the lot number change.**

Each lot number must contain homogeneous components or raw materials. If a specific product and/or manufacturing process doesn't lend itself to these requirements, alternate methods must be approved in advance by SL's SQE.

#### **4.8 Lot Traceability**

For all SL products, the supplier shall establish and maintain procedures for identifying the product during all stages of production, including: receipt, work in process, storage, and delivery. In addition, lot traceability for all sub-components and raw materials shall be maintained, along with process inspection data.

Each production lot (as defined in Section 4.7) shall be identified by a supplier lot number. The supplier may ship more than one lot per pallet, but each container on the pallet must contain only parts from one lot unless the parts are individually and discretely serialized.

The supplier lot traceability system must provide for the following requirements:

- Permit isolation of suspect product on a precise basis by lot number on each container.
- Ensure full traceability back to the supplier's system through barcode identification of supplier lot number on each container
- Enable causes of failure to be localized and corrective action to be taken at minimal cost to supplier and SL.
- Determine traceability to component lot numbers and production/quality data specific to the lot number identified on the container (backward traceability).
- Determine supplier finished product lot number(s) produced with a given lot of components or on a given shift of production (forward traceability).

#### **4.9 Record Retention**

Supplier records shall be retained for the length of time required by the ISO/TS standard and referenced AIAG documents. Suppliers must have a procedure for record retention, which defines the retention period for all records (those referenced in ISO/TS and other records generated by the supplier), as well as archive and disposal procedures. Quality records shall be made available to SL upon request.

#### **4.10 Product, Handling, Storage, and Delivery**

Suppliers shall establish, document, and maintain procedures for handling, storage, and delivery of product per ISO/TS requirements. Suppliers must also conform to any specific requirements documented on SL's purchase order or drawing/engineering specifications. SL's specific requirements include:

- **Handling**  
The supplier shall utilize methods of handling that prevent damage or deterioration before, during, and after the manufacturing process.
- **Storage**  
The supplier shall utilize secure storage areas to prevent damage or deterioration of product pending use or delivery. Appropriate methods for authorizing receipt and dispatch to and from such areas shall be stipulated in order to maintain control and assure First-In First-Out (FIFO) method of using or processing goods in the order purchased or received.

In order to detect deterioration, the condition of product in stock shall be assessed during the supplier's "Internal Quality Audit" process per ISO/TS requirements. Shelf life shall be monitored, as applicable, to ensure products shipped to SL have greater than 50% of the original shelf life remaining, unless approved in advance by SL Quality.

Shelf life expiration date and/or product manufacture date must be identified on each carton/container. Special storage condition requirements (i.e., temperature/humidity levels) shall be determined and implemented to prevent deterioration during storage at supplier locations.

- **Delivery**

The supplier shall arrange for the protection of product quality subsequent to manufacture.

The following applies to packaging concepts that have been approved by responsible SL TN supplier quality and packaging engineers.

Responsibility for any damages in transit will be determined by incoterms:

For incidents where the supplier is responsible for setting up shipments to SL Tennessee, SL reserves the right to reject the shipment for any damages.

For freight damages where SL is responsible for transportation of product, SL will accept the shipment and manage the freight claim accordingly.

For product shipped prior to PPAP with unapproved packaging concepts, the supplier is solely responsible for the safety of product until delivered to SL, regardless of incoterms. Suppliers are responsible to ship finished product to SL on a FIFO basis.

Suppliers shall notify SL's Material Planner and Purchasing in advance of any planned shutdowns or extended downtime that will affect shipment schedules. This notice shall be communicated as far in advance as necessary to provide sufficient time for the supplier to produce and ship inventory to cover the downtime period.

Suppliers are required to ship on time per SL's release schedules and quantities. Material releases are generated via Manufacturing Resource Planning (MRP) systems, which clearly details delivery requirements. These releases will be communicated to the supplier electronically through email or via fax.

Over shipments may be rejected and returned at the supplier's expense. Short shipments may require expedited shipments at the supplier's expense. Packing slips must accompany shipments, and must accurately reflect SL's purchase order number, part number, revision level, and quantity shipped.

Discrepancies may result in customs issues if SL moves material across borders for production. Such incidents may result in a supplier chargeback to recover any related costs to SL.

#### **4.11 Prototype / Pre-Production Product**

All prototype or pre-production product supplied to SL is expected to conform to the applicable drawing (latest revision), specification, and purchase order requirements in their entirety. If such requirements cannot be met for any reason, the supplier shall notify SL at the time of order placement, or immediately following subsequent discovery of any discrepancy, and request disposition.

Non-conforming product shipped without SL's written authorization is subject to rejection and chargeback for any related costs incurred by SL as a result of the non-conformance (product built, test failure, labor to sort parts, customer impact/costs, etc.).

## 5.0 PRODUCTION PART APPROVAL PROCESS (PPAP)

SL recognizes the AIAG Production Part Approval Process (PPAP) manual requirements for production part approval. PPAP submission date commitments must be provided by suppliers for all new and changed parts, and commitment dates must be met at all times.

If any supplier or SL issue causes a date to be jeopardized, the supplier must immediately communicate with SL's SQE and/or other Purchasing contact, and together set a revised submission date that will support program timing. PPAP submissions are expected to be 100% complete and conforming to applicable requirements upon initial submission.

It is the supplier's responsibility to resolve any issues preventing complete and conforming submission in advance of the submission date. Incomplete and non-conforming PPAP's will be rejected. PPAP submission dates that are not met, or PPAP's that are rejected may result in the issuance of a Quality Notice (QN) by SL and corrective action response/implementation by the supplier (see section 16.0).

PPAP approval must be granted by SL's SQE and/or PPAP Analyst prior to any production shipments by the supplier, including Production Validation (PV). All PPAP packages are to be scanned and submitted electronically in Adobe pdf file format, unless agreed to in writing by SL's SQE prior to submission.

The required PPAP submission level is 3, unless otherwise specified by SL's SQE and/or PPAP Analyst. For source-controlled products with third-party-owned tooling (i.e., automotive OEM connectors, terminals, etc.), PPAP submission to SL will be Level 1, including a copy of the approval document from the governing customer and a Part Submission Warrant (PSW) from the supplier.

Each supplier PPAP submission must include actual dimensional, material and test data (as applicable) documenting conformance to all print characteristics, notes and referenced specifications. **Blanket statements of conformance are not acceptable.**

Lack of PPAP approval is not an acceptable excuse for not meeting SL's shipment releases. It is the supplier's responsibility to submit a complete, conforming PPAP package on time to SL's SQE and/or PPAP Analyst.

First Time Submission Approval is expected of all suppliers. If lack of PPAP approval may affect the supplier's ability to ship product on time per SL's releases, the issue must immediately be brought to the attention of SL's SQE and/or PPAP Analyst, Procurement, and Production Planning

**Refer to the AIAG PPAP manual for specific details on PPAP requirements. Suppliers are required to adhere to SL specific requirements in addition to AIAG and ISO/TS requirements.**

### 5.1 Proprietary Documents

Proprietary documents may be excluded from PPAP submission upon approval of SL's SQE and/or PPAP Analyst. When such conditions exist, the supplier shall include a letter in the PPAP submission adequately justifying the reason the document is proprietary and stating that the document is available for review by SL at the supplier location, or at SL upon request.

### 5.2 Dimensional Layout Requirement

SL requires that a minimum two piece dimensional layout be performed. For multiple cavity/die tooling, a minimum of one part layout per cavity/die is required. All dimensional, material, and performance data must be less than one year old at the time of PPAP submission.

### 5.3 Performance Requirements

SL requires a minimum of 3 pieces to be tested, or as indicated in the performance specification.

#### **5.4 Sub-Assembly PPAP Submissions**

While SL maintains design control of purchased components in assembly, it is required that all suppliers submit their PPAP package for approval along with all sub-supplier PPAP submissions. This includes IMDS submissions. SL suppliers are responsible for managing the quality and PPAP approval of all sub-supplier components and materials.

#### **5.5 Master Samples**

The supplier must submit 2 PPAP master samples (minimum one part per cavity/die) with the PPAP submission, and must retain the balance of the master samples as indicated in the AIAG PPAP manual.

Master samples are to be identified and numbered to ensure traceability of the sample to the corresponding layout data. SL and/or the supplier may use these supplier-retained samples for future reference. As such, they must be easily identified and retrievable. If submission of master samples is not practical (i.e. chemicals), contact SL's SQE and/or PPAP Analyst for direction.

#### **5.6 Color / Appearance Approval Submissions**

The sample size for Color and Appearance Approval is a minimum of 12 pieces (with a minimum of 3 pieces per cavity). Fewer parts submitted will result in rejection. Color and Appearance Submissions should take place prior to submission of the PPAP package to SL, and an approved Appearance Approval Report (AAR) shall be included with the PPAP submission.

#### **5.7 Regrind**

The use of plastic regrind in molding processes is strictly prohibited in all SL products without written approval.

#### **5.8 Perishable/Expendable/Refurbished Tooling**

Perishable/Expendable tooling is defined as tooling that has limited useful life and is expected to be replaced during normal production activity (i.e. die cast tooling).

Controls for Perishable/Expendable tooling shall be referenced in the supplier's control plan and shall include a 2 piece 100% dimensional layout (minimum one piece per cavity for multiple cavity tools and dies), capability studies on significant characteristics as defined in Appendix I, and any affected component performance or functional requirements upon replacement and prior to shipment.

All items of Tooling, including tools, gages, devices, equipment, jigs, molds, and fixtures provided to the Supplier by SL or purchased by SL from the Supplier, shall be identified and maintained in accordance with SL's "Tool Loan Agreement" dated 04/29/2011. SL Purchasing will issue a copy of the agreement with any resultant Purchase Order.

#### **5.9 Bulk Material**

Bulk material is defined as standard, commercially available material and does not require PPAP resubmission when changing sub-suppliers (i.e. metal rods, sheets, or coils; standard

plastic resins; chemicals). At a minimum, a Level 1 PSW with applicable conformance testing/analysis data is required for bulk material PPAPs.

Welded or rolled tubing and customized special material requires full PPAP submission when changing sub-suppliers. All suppliers used must be approved by SL and must meet all of SL's quality requirements.

### **5.10 Packaging**

Packaging used by component suppliers must be approved for use by submitting SLTN Packaging Submittal form. The requirements for this are detailed in Supplier Logistics Expectation document that should be separately signed and returned in addition to this document. This form must be approved before proposed materials are used to ship parts to SL. If a supplier packs in unapproved packaging, a repacking fee will be charged, and any damaged parts will be charged back.

The supplier is responsible to determine box and dunnage construction, including wall thickness, in order to protect contents from shipping damage.

Packaging and related materials purchased by SL (i.e. boxes, dividers, plastic wrap, box labels, etc.) do not require PPAP submission, although evidence of industry standard testing may be requested.

### **5.11 International Material Data System (IMDS) Requirements**

It is the supplier's responsibility to complete the Design for Environment (DFE) requirements, enter all material information into the IMDS, and include evidence of IMDS approval in PPAP submission. Suppliers are required to complete the Restricted Materials and Recyclability Reporting Certification. Access to IMDS is available through <http://www.mdsystem.com>. **(Reference: SL's recipient code for IMDS is 51586)**

It is the responsibility of all suppliers to submit the necessary information into the IMDS database. As a result, the supplier must require their sub-suppliers to submit IMDS to their recipient code; must review the sub-suppliers' submissions for compliance; and must approve or reject submissions. The supplier must then use approved sub-suppliers' IMDS modules to build their own IMDS module for submission for approval by SL.

All material and components must be included in the submission. The supplier is responsible for correcting any rejections in IMDS and resubmitting the updated IMDS to SL in a timely manner.

All plastic parts must be identified with appropriate ISO marking codes. These markings should be indicated on part drawings, and must correlate with materials listed in the IMDS database.

### **5.12 Annual Validation / PPAP Requirements**

Annual validation is required to be performed by the supplier and be documented in the Control Plan (see section 4.3). Results shall be maintained by the supplier and be made available to SL upon request. Annual PPAP submissions are not required to be submitted to SL unless specifically requested. Conformance to this requirement is subject to audit by SL.

### **5.13 Service Component PPAP Requirements**

The AIAG PPAP manual does not require a formal PPAP submission for service component orders, even if tooling has been inactive for 12 months or more—this clause applies to production volume components only.

When service parts are ordered by SL, it is required that suppliers implement the same controls as documented on the most recent Control Plan approved for volume production. Any changes to the Control Plan for service must be approved in advance by SL's SQE and/or PPAP Analyst.

## 6.0 SHIPMENT CERTIFICATION REQUIREMENTS

SL will reject all shipments that are received without required quality data and certifications.

### 6.1 Pre-Launch Part Certification

Shipments of "Pre-Launch" parts must include a description of the dimensional measurements, material and functional/performance tests that occur after prototype and before full production.

The Pre-launch Control Plan includes additional product/process controls to be implemented until the manufacturing process is validated.

These additional controls may include more frequent inspections, more in-process and final check points, statistical evaluations of process capability, and so forth. The purpose of the Pre-launch Control Plan is to contain potential product and process nonconformities prior to and during production trial runs, and to validate the manufacturing processes.

Pre-Launch criteria will be established, agreed upon and documented during ESI meetings. Data is to be submitted with applicable shipments. A color sticker will be affixed to the upper right corner of the container that has data reporting information.

SL's SQE will review and approve all exceptions or clarifications to these requirements.

### 6.2 Breakpoint / Cleanpoint Shipment Certification

The first three shipments after a change in the design of a component must be clearly identified with SL's Breakpoint Flags taped on all four sides of each pallet, and a small descriptive label affixed near the part identification label on each container. Notice should be sent to SL's SQE with Breakpoint lot information and expected first delivery date. When at all possible, a VCD label or document should be included with the first three shipments detailing the change.

The first three shipments after a Corrective Action has been implemented, or a 100% sort for defects has been completed, must be clearly identified with SL's Cleanpoint Flags taped on all four sides of each pallet, and an identifier such as a sticker or green dot on each container/box near the part label. Do not obscure information on part labels.

These labels are available from SL's SQEs.

### 6.3 On-Going Shipment Certification

Each shipment must be inspected to make sure parts and count match the shipping label. Regular dock audits must be conducted to verify shipping data.

The supplier must provide data within 24 hours at SL's request for any characteristic in the approved Control Plan, even if the data is not required to be submitted with each shipment.

## 7.0 NOTIFICATION OF QUALITY CONCERNS

SL requires that suppliers formally notify the affected SL manufacturing plant(s) of any quality concerns within 24 hours of discovery **without exception**. This applies to all quality concerns identified by suppliers for which product shipped is suspect. If exposure has not been determined within 24 hours of

discovery and product shipped to SL has not been proven to be void of the concern, notification is required<sup>2</sup>.

Suppliers should be prepared to present the concern in detail, including exposure (i.e., lot number(s) affected), containment actions, and a Corrective Action plan.

## **8.0 REWORK / REPAIR**

Rework consists of any actions to the product that are not part of the documented and PPAP approved production process. For certain commodities, unique terminology exists (“reformulation” for chemical processes, “repair” for electronics) which describes concepts synonymous to rework. Since any action to salvage a product which does not originally meet customer requirements is both a source of variation and inherently costly, SL’s goal is to eliminate such actions.

When rework is necessary as an isolated measure, the supplier must develop written procedures. These procedures must provide for additional inspection and testing after rework to ensure conformance to SL’s specifications prior to shipment or further processing.

In all cases, rework must be approved in advance by SL via a Supplier Request for Engineering Approval (SREA) process (see Section 15.0). The SREA must be submitted along with all rework procedures, Control Plans and technical justifications.

Where on-line repair is part of the manufacturing process, disposition of such activities will be made by SL as part of the PPAP process. As such, all PPAP documentation must reflect repair procedures and controls (Process Flow Diagram, PFMEA, and Control Plan). If the repair is not included in the PPAP approved documents, it is not approved by SL.

## **9.0 RETURNED PRODUCT ANALYSIS**

The supplier is required to analyze nonconforming product returned from SL manufacturing plants, engineering tests and vehicles in the field. Records of the results of these analyses must be submitted to SL upon completion.

Suppliers shall submit corrective actions for any defects discovered during analysis to SL’s SQE (see Section 16.0 - “Corrective Action”).

### **9.1 Cost Recovery for Nonconforming Product**

The supplier shall absorb any costs associated with nonconforming product as received or processed through a SL manufacturing plant. These costs shall include, but not be limited to: premium freight (inbound and outbound), scrap, returned material, labor (sorting, rework, repair, teardown, overtime, downtime, etc.), testing beyond normal requirements, customer communications, liaison visits, customs fees, and related customer chargebacks.

Notification of chargeback will be sent prior to issue of any debit memos. If disputing a chargeback, response is required within 2 business days of notice. Disputes must be accompanied by factual reasons that the chargeback, or portions thereof, is not the supplier’s responsibility. Lack of timely response may result in processing of the chargeback and product return (as applicable), utilizing the SL QN number as the RMA number.

## **10.0 HEAT TREATED PARTS**

SL requires that all heat treat suppliers follow the heat treating requirements documented on part prints and in any referenced SL, industry, or customer specifications, as well as comply with SL heat treat audit requirements. All heat treat sources utilized by suppliers and their sub-suppliers shall be approved



by SL individually via successful heat treat audit and PPAP submission. Unapproved heat treat sources shall not be used without specific approval of SL via PPAP submission. Annual supplier heat treat self-assessments are to be conducted and provided to SL upon request.

### **11.0 RUN AT RATE (R@R) / LAUNCH READINESS REVIEW (LRR)**

A Production R@R must be performed to verify that a supplier's actual production process is able to meet program volumes at an acceptable quality level prior to product launch. The documentation format required is determined by the ultimate OEM for each component (e.g. GMW1927-35 for GM). Format for submission should be approved by SL SQE. The SDC (Standard Daily Contract) rate in this submission should match SL's rate.

A process acceptance/qualification audit must be conducted to ensure that new components meet SL's yield, rate, and quality requirements. R@R is mandatory on newly tooled components, components with significant volume increases, or components with changes that require significant process or assembly changes. R@R's may be witnessed by SL personnel, or performed by the supplier with results submitted to SL. Specific R@R requirements will be established during ESI.

R@R shall be successfully completed prior to PPAP approval. If this is not accomplished, a provisional PPAP approval may be issued at the discretion of SL's SQE. Additionally, SL may also elect to conduct a LRR of critical components at the supplier's facility. Suppliers will be notified in advance of this requirement and will be provided with specific requirements (agenda, LRR checklist, etc.) in order to prepare for the review.

### **12.0 HIGH IMPACT SUPPLIER PROGRAM**

The SL High Impact Supplier Program is a process to further engage suppliers of critical components/materials in the launch phase at SL plants. The program requires suppliers of high impact components/materials to support certain pre-production build events when requested by SL (such as Production Validation (PV), initial production launch, etc.). Supplier may be requested to assist SL in root cause analysis and resolution of any quality and assembly issues encountered during these builds related to supplied components/materials.

This program is for the combined benefit of SL and our suppliers, and will enable us to quickly and effectively reach root cause and develop improvement plans. This will enable us to reduce the time and effort required to solve problems.

Suppliers selected to participate in this program will be notified by SL in advance of the build events.

### **13.0 SUPPLIER CONTROL OF SUBCONTRACTORS**

Suppliers to SL shall select subcontractors on the basis of their ability to meet subcontract requirements and have effective quality and system controls to fully meet SL's Quality requirements defined herein. Suppliers shall target subcontracted business with ISO/TS 16949:2009 or ISO 9000:2008 compliance as much as possible.

The supplier shall be prepared to show documented evidence of subcontractor quality levels at the request of SL and also provide SL and SL's customers access to subcontractor facilities and records if requested at any time.

Suppliers are fully responsible for the quality of goods and/or services subcontracted. SL's recommendation or stipulation of a subcontractor shall in no way relieve the supplier of full responsibility for ensuring the subcontractor, and the products they supply, meet all SL requirements.

### **14.0 SUPPLIER INITIATED CHANGES**

SL encourages material, design, and process improvements to enhance quality and reduce cost. However, all changes as specified in the AIAG PPAP manual requiring customer notification (Table 3.1) or customer PPAP submission (Table 3.2) require SL approval prior to implementation. All such changes shall be submitted to SL via SREA (see section 15.0 for further detail on the SREA process) a minimum of 90 days prior to planned implementation.

SREA's shall include the justification for the change and the proposed validation / PPAP plan. SL approval of the SREA is approval to proceed with validation of the change as detailed in the SREA; it is not approval of the change. Final change approval occurs once the change has been successfully validated and the PPAP is approved by SL.

The first step in gaining approval is to contact the SL Buyer and review the proposed change, as well as the proposed PPAP plan for validation and approval of the change. This plan shall include a timing chart detailing phase in/out and associated tasks and timing to prevent supply shortages. Upon concurrence from the buyer, the SREA shall be submitted to SL's SQE as described above. Approval to proceed with the validation process will be given, or additional validation requirements will be discussed and agreed to by all parties.

The next step is to successfully complete the validation process as agreed and submit a PPAP package to SL's SQE. In certain cases, SL may require product testing and/or be required to gain approval from SL's customer(s). Once this process is completed to SL's satisfaction, the PPAP will be approved and the supplier may begin production incorporating the change.

**See AIAG PPAP manual for specific instructions when to submit PPAP for changes.**

**Note: Suppliers must receive written PPAP approval from SL's SQE prior to shipping product produced incorporating a change as defined above. If any doubt exists regarding approval requirements of a change, contact SL's SQE for assistance. Failure to obtain change approval in advance of shipment will result in product rejection and financial liability for all affected SL raw, work-in-process and finished goods inventory.**

## 15.0 SUPPLIER REQUEST FOR ENGINEERING APPROVAL (SREA)

SL requires that suppliers ship product which conform 100% to the engineering print requirements and referenced specifications. Additionally, SL requires that the manufacturing process remain consistent with that utilized to produce the PPAP-approved product. These requirements are to be followed without exception.

AIAG PPAP form #THE-1002 (Product/Process Change Notification) must be submitted and approved by SL prior to shipping product which does not conform to SL's prints and referenced specifications, or is produced from a "changed" process (see Section 14.0 for complete definition). Verbal direction, discussions and/or approvals from SL are not valid without a fully approved SREA.

**Note: Failure to obtain SREA approval in advance of shipment will result in product rejection and financial liability for all affected SL raw, work-in-process and finished goods inventory.**

Sufficient detail, supporting data, corrective actions, etc. shall be included with the form to facilitate the approval process. The supplier may be requested to submit additional information prior to approval, as determined by SL. Submission of an SREA is in no way approval to ship deviated product or implement changes. Approved SREA are fully signed and numbered.

The lack of SREA approval is not an acceptable excuse for not meeting SL shipment releases. If SREA approval may affect the supplier's ability to ship product on time per SL releases, the issue must

immediately be brought to the attention of SL's SQE, Purchasing Manager, and Material Planner in each facility affected.

Affected shipments must be identified with a supplier assigned SREA tracking number on each carton/container to ensure material is properly identified when received at SL.

## 16.0 CORRECTIVE ACTION

It is required that suppliers maintain a system for corrective action of quality concerns. This system must include a multi-disciplined problem solving methodology (i.e., 5 phase, 8D, 7 Step, etc.) and follow-up of corrective action implementation and effectiveness. Alternate formats are acceptable, provided the content is inclusive of this documentation.

Listed below are various types of corrective actions and their effect on corrective action closure:

- **Type I:** Design, material, or drawing change. Corrective action may be closed upon implementation and verification of the change.
- **Type II:** Mistake proofing device or other systemic process error proofing is implemented. This can include automated inspection equipment. Corrective action may be closed upon completion of a 30 day evaluation of effectiveness.
- **Type III:** Inspection / training only. Insufficient for corrective action closure.

Supplier quality ratings are computed by returned Parts per Million (PPM) shipped ratios. Suppliers who do not support on-site containment will be subjected to the full lot quantity returned, as opposed to the actual number of defects, in the computation of the PPM rating.

**To calculate PPM: If there's 25 defective pieces in a shipment of 1,000 parts.  $25/1000 = .025$  or 2.5% defective.  $.025 \times 1,000,000 = 25,000$  PPM.**

### 16.1 Corrective Action Response

Any supplier quality concerns detected at SL and/or SL customer locations will be formally directed to the appropriate supplier contact. Adherent to GM QSB Fast Response standards, the required supplier response is as follows:

#### 1. Within 24 Hours of Notification (48 Hours for Overseas Suppliers):

Initial response due to SL's SQE detailing:

- Containment actions (at supplier and SL)
- Suspect inventory quantity, lot numbers, and location (e.g., at supplier, out for delivery)
- Return authorization number, if applicable

#### 2. Within 3 Days of Notification:

- Root Cause Analysis, including steps taken in the root cause investigation.

#### 3. Within 10 Days of Notification:

Completed corrective action plan due to SL's SQE detailing:

- Containment information, and note of any revisions since initial report (16.1.1)
- Root cause analysis, and note of any revisions since initial report (16.1.2)
- Permanent corrective action(s) and plan to verify effectiveness.
- Recurrence prevention plan.

- Copies of updated APQP documents (PFMEA, CP, etc), and read across, as applicable.

If it is not possible to implement and verify permanent corrective actions in the ten (10) day window, SL's SQE must still receive the supplier's response, including dates that the permanent resolution will be implemented, with all associated task completion dates and responsible persons documented. Follow-up reports must be sent on a weekly basis tracking progress until completion. Actual task completion dates and verification records must be submitted to SL's SQE for corrective action closure.

SL's SQE will review and approve closure of all corrective actions, and reserves the right to require additional controls to be implemented and/or additional documentation to be provided to effectively resolve supplier quality issues. Late corrective action responses will negatively impact quarterly scorecard results.

## 16.2 Containment Actions

Defect containment by the supplier at SL's locations (i.e. on-site sorting) is expected within 24 hours whenever possible. This is to be coordinated with SL's SQE. Any issues that make on site sorting impractical may be discussed with SL's SQE and alternate actions taken. Replacement material requirements are to be coordinated with SL's Material Planning department.

All certified material must be identified by a mark as agreed by both parties. Marks can be on or by each shipping label on each carton, and on sorted parts themselves if a non-visible surface is available for marking. All sorted parts must be identified, and sorting must continue until the permanent corrective action has been implemented and approved by SL's SQE.

## 16.3 Escalation Process

Initial notification. SL TN SQE (or designee) formally notifies supplier of quality concern via supplier quality alert (SQA). Details of the concern are shared, as well as the corrective action response timeline.

Second (follow-up) notification. SL TN quality manager follows-up to request the missing information in the corrective action response. If the supplier does not meet the requirements of the corrective action response after two notifications, then the supplier will be required to contract a third party product certification company to independently, 100% certify all product once it arrives at SL. Third party certification shall be on-going until the supplier has submitted all required documents, and the corrective action response has been approved by the Quality Manager.

Third (final) notification. If after a 3<sup>rd</sup> attempt by SQE and / or quality manager, the corrective action response is still incomplete (without action plan) or unanswered, the supplier may be placed on new business hold, and possibly desourced.

Exit Criteria. Supplier management must meet with SL TN quality and purchasing department to present a plan for future commitment to a passing scorecard. Supplier must have 3 consecutive score card with passing results or a demonstrated trend of quality improvement.

## 17.0 SUPPLIER CS1/CS2 CONTAINMENT and PHASE REVIEW PROGRAM

The supplier must have a secured, segregated area to hold all non-conforming parts and suspect material. For suppliers with chronic or repetitive quality issues, SL's SQE reserves the right to impose additional containment measures at supplier expense to ensure conforming product is received at SL.

Suppliers required to implement either Level 1 or 2 Containment will be notified by SL's SQE. These additional containment measures are intended to be interim steps to ensure conforming product is shipped to SL. Permanent actions to prevent recurrence are expected to be implemented in conjunction with these containment programs. Once permanent actions are implemented and verified effective for 30 days, containment may cease with the approval of SL's SQE.

Each container of certified material must be clearly identified with a listing of all conditions for which the material has been certified.

In addition, SL reserves the right to notify third party Quality System registrars of Quality System failures if open quality issues are not resolved by this time. The supplier will be notified prior to this action being taken.

#### **17.1 CS1 Containment:**

The supplier is required to perform a 100% certification of all products prior to shipment through an additional, off-line inspection process. The supplier is also required to subcontract a third party certification contractor to independently 100% certify all products at SL TN once product has arrived. This measure would be in addition to any existing controls and containment measures previously implemented. This level is imposed on suppliers who have failed to contain or correct quality issues effectively and immediately.

#### **17.2 CS2 Containment:**

In addition to the Level 1 Containment program, the supplier is required to subcontract a third party product certification contractor to independently 100% certify all products prior to shipment to SL. This level is imposed on suppliers who fail to contain or correct quality issues through the Level 1 Containment program.

#### **17.3 CS1 Containment Exit Criteria:**

Inspection data shows no rejects into the inspection area for a minimum of 30 days (90 working days for mislabeling) AFTER implementation of irreversible corrective actions. If deemed appropriate by Supplier Quality, the duration of the Controlled Shipping activity may be adjusted. Implement error proofing as appropriate within your process. Evidence that a thorough problem-solving process was used, the true root cause of the problem was discovered, and irreversible corrective actions were implemented and validated. Statistical process control used when appropriate to confirm a stable and capable process during the 30 or 90 days after implementation of irreversible corrective action. All documents [Potential Failure Mode and Effects Analysis (PFMEA), Process Control Plan, Pre-Launch (GP-12) Control Plan, Process Flow Diagram, Operator Work Instructions, training records, PM Plans, approved PRR response per GP-5, etc.] must be modified and approved, and PPAP submitted and approved as required.

#### **17.4 Supplier Phase Review Program:**

The Supplier Phase Reviews are intended to heighten the awareness of SL's supply base to quality performance and to focus the quality improvement efforts of SL's suppliers toward a shared objective with the company.

SL's SQE will initiate Phase Review meetings at a specified location for suppliers with significant quality issues, chronic quality issues, or negatively trending quality performance.

At these meetings, suppliers will be required to present corrective action plans to SL Plant Management, Supplier Quality, Purchasing, and others at plant discretion. The program consists of three phases, as detailed below:

**1. Phase 1:**

Suppliers will be selected for a Phase 1 review based on the following criteria:

1. Repetitive quality issues
2. Highest monthly PPM
3. Chronic monthly PPM activity
4. Negatively trending PPM activity
5. Quality incidents causing significant impact to SL production and/ or SL customers.

This phase requires on-site attendance of the Plant and Quality Managers to review corrective action plans in detail.

**2. Phase 2:**

Suppliers will be selected for a Phase 2 review if issues are not completely resolved as committed during the Phase 1 review. This phase requires on-site attendance of Operations and Quality Management to review corrective actions in detail. "New Business Hold" status may be imposed on the offending supplier location.

**3. Phase 3:**

Suppliers will be selected for a Phase 3 review if issues are not completely resolved as committed during the Phase 2 review. This phase requires on-site attendance of top management (President) to review systemic reasons for corrective action failure and plans to resolve. "New Business Hold" status is required for all supplier locations. Supplier will not be allowed to quote on new business until the issues are resolved and closed by SL's SQE.

## **18.0 SUPPLIER RATINGS (SCORECARD) AND SUPPLIER RISK ASSESSMENT**

### **18.1 Quarterly Scorecards**

Suppliers will be rated semi-annually by SL Supplier Quality on the basis of their ongoing quality, delivery, cost, and communication performance to SL.

The SL requirement for quality performance measured in PPM defect rate is zero at all times. The SL requirement for on-time delivery is 100% at all times. Any deviation from the above requirements may require the implementation of documented corrective actions to meet these requirements.

Approved suppliers whose total rating falls below 60 percent are subject to being placed on "New Business Hold" status per Management review. Purchasing will review year-to-date supplier ratings every quarter and update supplier status accordingly based upon these ratings and criteria.

Suppliers are encouraged to review quarterly ratings for accuracy and submit countering information to resolve any disputes with the responsible SL plant.

## 18.2 Supplier Risk Assessments

SL TN will perform a risk assessment on all suppliers annually. Suppliers will be notified of their risk rating as low, medium, or high, based off the Supplier Audit Score and the average of the last two quarterly scorecards. All new suppliers will be rated as high risk for the first year.

### 1. Low Risk Supplier

- Scorecard average is above 81, and
- On-site Supplier Audit score is above 70%.

In order to achieve low risk standing, both scorecard and audit criteria must be met. Low risk suppliers will be required to accommodate an on-site audit by SL every 3 years.

### 2. Medium Risk Supplier

- Scorecard average is between 61 and 80, and
- On-site Supplier Audit score is between 50 and 69.9%.

Suppliers who score below the threshold in either or both the scorecard or audit criteria will be considered medium risk. Medium risk suppliers will be required to accommodate an on-site audit by SL every year, and performance will continue to be monitored.

### 3. High Risk Supplier

- Scorecard average is below 60, and
- On-site Supplier Audit score is less than 50.

Suppliers who score below the threshold in either or both the scorecard or audit criteria will be considered high risk. High risk suppliers will have the following measures applied:

- SL will perform on-site audits, annually and as requested.
- SL will require monthly, weekly, up to daily conference calls to review all open issues. These calls will be documented.
- The supplier will be placed on new business hold until performance has improved.

## 19.0 BARCODE CONTAINER SHIPPING LABEL REQUIREMENTS

It is the responsibility of the supplier to provide barcoded container shipping labels that meet SL's requirements as defined in the Barcode Label Requirements procedure contained in the Supplier Logistics Expectations document.

Strict adherence to these specifications for the barcode identification labels will reduce implementation cost and increase benefits throughout industry. Failure to comply with these requirements may result in rejection of the shipment.

## 20.0 ACCESS TO FACILITIES AND RECORDS

Suppliers shall allow SL, and SL customers, access to any facility and quality records associated with the production and supply of products directly to, or on behalf of, SL. This requirement extends to all sub-contractors as well.

## 21.0 TRADE COMPLIANCE ASSURANCE

For any product coming into the US from a Foreign Country, supplier shall submit a copy in Excel format of the Commercial Invoice and packing list for every shipment to the SL Trade Compliance Assurance team upon departure from the supplier or any directed sub-supplier's facility.

Supplier shall include part number and description of each item on the Commercial Invoice and packing lists. Supplier shall also submit a Certificate of Origin and/or a Manufacturer's Affidavit with the first shipment of each part, and shall submit annually thereafter before December 31.

Supplier shall submit any Free Trade Agreement Certificate forms (such as NAFTA, KORUS, etc.) with the first shipment of each part, and shall submit annually thereafter before December 31.

Supplier shall submit a new Manufacturer's Affidavit if/when any component or subassembly is re-sourced to a different sub-supplier.

Supplier shall make all correspondence in English when corresponding with the Compliance Assurance team. Contact SL SQEs for current contact information to the Compliance Assurance Team. This shall include visibility of all supplier and sub-supplier manufacturing and shipping locations and DUNS numbers upon request.



Appendix I

Significant Characteristic Guidelines

<p style="text-align: center;">▲ (Important)</p>	<p style="text-align: center;">* / SC (Significant)</p>	<p style="text-align: center;">* SPC / CC (Critical)</p>
<p><b>Definition:</b> Monitors features that are representative of overall part function/appearance and/or tooling integrity</p> <p><b>Used For:</b> a) SL Incoming Inspection dimension/feature (per plant procedure)  b) Must be included in supplier control plan as item that is periodically checked</p>	<p><b>Definition:</b> Identifies features that are significant to maintain which, if discrepant, could hinder or affect the design or functional intent of the component/assembly</p> <p><b>Used for:</b> a) Customer specified critical or significant characteristic (on Top end drawing).  +/ b) Critical to form, fit, or function  +/ c) Customer or component part mating feature  +/ d) Dimensions susceptible to excessive tool wear</p> <p>Supplier must prove capability at PPAP per AIAG.</p> <p>On-going statistical controls must be specifically addressed in supplier control plan (Frequency of check approved by SL during PPAP).</p> <p>Supplier data must be submitted to SL when requested SL Incoming Inspection dimension/feature</p>	<p><b>Definition:</b> Identifies features that are critical to maintain which, if discrepant, could hinder or affect the design or functional intent of the component/assembly AND are related to Safety, Performance, or Regulation items</p> <p><b>Used for:</b> a) Customer specified critical or significant characteristic (on Top end drawing).  +/ b) Critical to form, fit, or function  +/ c) Customer or component part mating feature  +/ d) Dimensions susceptible to excessive tool wear  +/ e) Safety, Performance or Regulation item</p> <p>Supplier must prove capability at PPAP per AIAG.</p> <p>Requires <b>mistake-proofing</b> and/or <b>functional verification</b> in assembly OR <b>100% inspection</b> (by supplier or SL) with method approved by SL SUPPLIER QUALITY.</p> <p>On-going statistical controls must be specifically addressed in supplier control plan (Frequency of check approved by SL during PPAP).</p> <p>Supplier must show process parameter capability</p> <p>Must be specifically addressed in supplier control plan (Frequency of check approved by SL during PPAP)</p> <p>SL Incoming Inspection dimension/feature</p> <p>Should be used sparingly</p>