Supplier Quality Guideline

At Enovation Controls,

We Exist to **CONQUER COMPLEXITY**…

When projects get complex, that's when customers turn to us. We offer an intense understanding of unique applications to solve complex system challenges like it's never been done before. We go all-in as a turnkey provider and are relentless in our commitment to deliver game-changing technology to our customers.

Because of this statement, we have created the Supplier Quality Guidelines to help us ensure the highest quality for our customers with the support of our suppliers. This guideline details the minimum quality assurance requirements for our suppliers. Our expectation is that our suppliers' management drives these details within their organizations and elevates to match our core values.

- **CLEAR A PATH TO CATALYZE OUR CUSTOMERS' SUCCESS**
- **BE RELENTLESS TO WIN**
- **QUESTION EVERYTHING TO CULTIVATE EXCELLENCE**
- **CHALLENGE CONVENTION TO CHANGE THE GAME**
- **ENRICH LIVES TO UNLEASH POTENTIAL**
- **DO THE RIGHT THING TO LIVE IN INTEGRITY**

As we continue to move forward, it is essential Enovation Controls ensures quality for all our customers. This can only be achieved by each member of the supply chain taking ownership of their process and responsibilities. The supply base is expected to deliver on their commitments and ensure the highest levels of customer satisfaction.

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Supplier Quality

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Enovation Controls Overview

The FW Murphy brand was established in 1939 and is committed to providing innovative products and services for comprehensive equipment management and control solutions.

These solutions are utilized in a variety of markets including off-highway and mobile equipment, on-highway vehicles, power generation controls, commercial marine, recreational marine, irrigation and water pumping.

Our headquarters are in Tulsa, Oklahoma, USA. The company also has manufacturing and engineering locations around the world including: Tulsa, Oklahoma; Salisbury, UK; and Pune, India.

Scope

This document describes Enovation Controls' Quality Requirements for suppliers, who provide purchased parts to Enovation Controls, Inc.

It is part of the purchasing agreement for parts and materials used in the manufacture and assembly of Enovation Controls products and service parts. Contractual or other legal provisions shall take precedence over all requirements stated in this document.

Direct suppliers are **required** to cascade these requirements to lower tiered suppliers throughout the supply chain, a practice referred to as "flow-down."

Purpose

These requirements follow Enovation Controls' Quality Policy: "*we delight our customers by exceeding their expectations in quality, reliability, and service. We provide implicitly trusted products worldwide"*. The goal of Enovation Controls is to provide customers with the best products and services, and we expect no less from our suppliers.

The relationship with our supplier is a business partnership. When both parties are working to make sure the partnership is a success, it will be a success. In the

long run, having a win-win supplier relationship will be a competitive advantage for both.

Business relationships are based on the supplier executing the following:

- Becoming involved in product development
- Managing commitments and deadlines
- Providing added value
- Developing and maintaining a long-term relationship with Enovation Controls
- Communicating frequently and proactively

Suppliers for Enovation Controls are expected to continually work to improve their processes and performance in the following areas:

- Quality
- Delivery
- Total Cost
- Warranty

Suppliers are responsible for ensuring their products and/or services meet all requirements and assume full responsibility for quality issues. Acceptance by Enovation Controls does not relieve the supplier of any responsibility.

Suppliers are to read the Enovation Controls Supplier Quality Guidelines. By accepting the terms and conditions the supplier is also agreeing to abide by the policies in this manual.

Ethics Policy

Enovation Controls is committed to doing business to the highest standards of legal and ethical conduct.

Enovation Controls employees shall not accept any gifts, favors, gratuities, benefit, loan, credit, prejudicial discounts, entertainment or service which could be construed as a business inducement above a nominal value. Suppliers should not routinely provide meals. If employees of Enovation Controls travel to a supplier's site the supplier may provide or pay for meals as long as the meal is appropriate to the effective conduct of business, not extravagant and that supplier payment of the meal is in compliance with the supplier's policies.

Suppliers and sub-suppliers of Enovation Controls shall abide by all national and local laws and regulations of the countries in which they are operating. If legal requirements conflict with local or industry practices, the supplier shall follow the legal requirements of the regulations. Suppliers and sub-suppliers will not use child labor. “Child” is defined as a person younger than eighteen (18) or sixteen (16) where local law allows or the local legal minimum age for employment or the age for completing compulsory education. Suppliers and sub-suppliers will not use any forced or involuntary labor and will treat each employee with dignity and respect. Suppliers will not use corporal punishment, threats of violence or other forms of physical, sexual, psychological or verbal harassment or abuse. Suppliers will provide employees with a safe working environment. Suppliers shall compensate employees by providing wages and benefits that comply with local and national laws of the country in which the supplier is operating.

Enovation Controls recognizes cultural differences exist but believes all terms and conditions of employment should be based on an individual’s ability to do the job, not on the basis of personal characteristics or beliefs. Suppliers and sub-suppliers will not discriminate in hiring and employment practices, including salary, benefits, advancement, discipline, termination or retirement, on the basis of race, religion, age, gender, nationality, social or ethnic origin, sexual orientation, political opinion or disability.

Section 1502 of the Dodd-Frank Wall Street Reform Act requires US publicly traded companies to disclose whether the products they manufacture or contract to manufacture contain conflict minerals that are necessary to the functionality or production of those products. Conflict minerals are defined as gold, tin, tantalum, and tungsten, regardless of where they are sourced, processed or sold. **Suppliers and sub-suppliers shall not use conflict minerals originating from the Democratic Republic of Congo or surrounding countries**. **Suppliers shall conduct a reasonable country of origin of all conflict minerals in the Supplier’s product and disclose the conflict mineral smelter data to Enovation Controls annually.** *Suppliers shall immediately investigate and remedy all reports of non-compliant or sanctioned suppliers, provide Enovation Controls with an updated CMRT verifying they have removed non-compliant refiners from their supply chain.* Enovation

Controls fully supports the intent of the legislation to end violent conflict in the Democratic Republic of Congo and surrounding countries.

Suppliers shall guarantee merchandise sold to Enovation Controls does not infringe upon any patents, trademarks, or copyrights. Suppliers must provide Enovation Controls with any applicable licenses and/or agreements for selling or manufacturing products sold to Enovation Controls upon request. Supplier agrees to indemnify and hold harmless Enovation Controls, its officers, agents, successors, assignees and customers against all damages, claims, demands, attorney's fees and costs of any kind for actual or alleged infringement of any trade-name, trade-mark, and patent or patents because of the possession, sale or use of any material supplied to Enovation Controls.

Suppliers and sub-suppliers will comply with all laws, regulations and requirements of any governmental or administrative body which may be applicable to the manufacture, advertising, merchandising, packaging, publicity, promotion, sale, distribution, shipment, import or export of any goods. Supplier shall respond promptly and fully to any investigation or recall of Goods by any such body and shall indemnify and hold harmless Enovation Controls from all expenses associated therewith, including, without limitation, reasonable attorney's fees and costs.

Suppliers must protect the intellectual property and technology of Enovation Controls.

Quality Policy

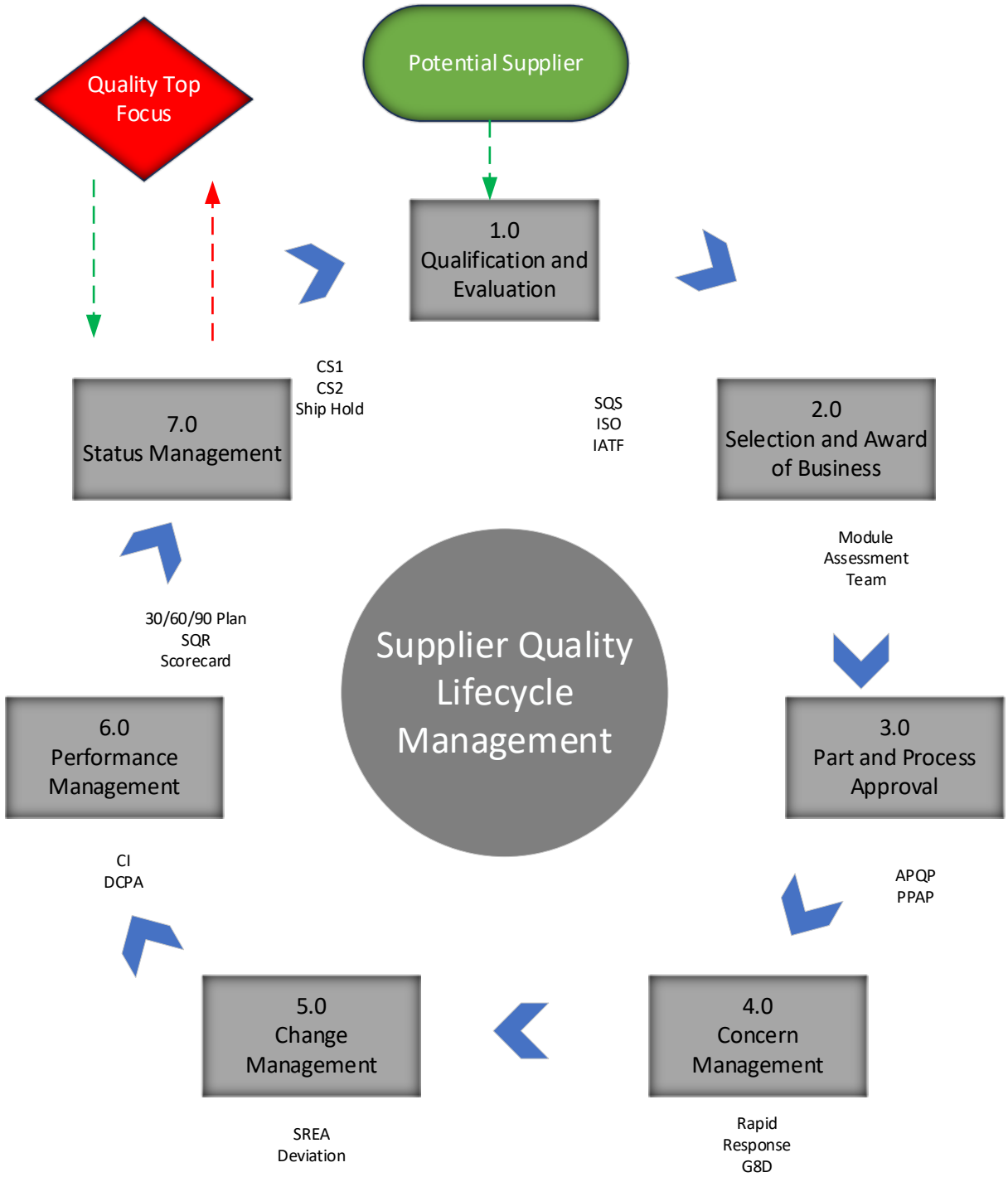
At Enovation Controls we delight our customers by exceeding their expectations in quality, reliability, and service. We provide implicitly trusted products worldwide, and support our employees through continuous development and training in the pursuit of never-ending improvements in quality.

Methodology

Supplier Quality Lifecycle

The seven sections to follow illustrate the requirements for suppliers with core tools to be used, and the way results are to be measured and evaluated. The Enovation Controls Supplier Quality Representative will work with the supplier to ensure any deviation from these requirements does not affect the finished part requirements.

Supplier Quality Lifecycle Management Flow Diagram



1.0 Supplier Qualification and Evaluation

1.1 Enovation Controls Supplier Survey and Assessment – SQS/SAP

The Enovation Controls Supplier Quality Survey (SQS[TM1]) and Supplier Assessment Process Audit (SAP) are a formal examination of a supplier's production quality system and process conducted by an Enovation Controls Supplier Quality Representative. Participation from all levels of the supplier's organization, including management, is expected during this evaluation. Enovation Controls reserves the right to conduct an assessment at the supplier location at any time. For new suppliers, the assessment may be completed prior to, or after, the award of business, at the discretion of Enovation Controls. Enovation Controls may choose to waive SQS for TS-certified suppliers, with Supply Chain concurrence.

A supplier assessment may be conducted at the manufacturing locations for prospective suppliers, current suppliers, and/or current suppliers with changes in manufacturing location, products, or engineering changes which affect the current product or process. The assessment may take several days depending on the complexity of the process under review.

For the SAP audit, suppliers are expected to achieve an "A" classification and to take action for a classification less than "A". Formal corrective action using the Global 8D system is required for SAP line items receiving a six or less rating, and for an overall score of less than 80. The SQS expectation is 3 or better category/overall and a G8D for anything below a two. The EC Auditor issues a "D0" Global 8D to capture the supplier corrective action responses, and to ensure it is visible throughout the Enovation Controls organization. Reference the SQS/SAP Form for detailed explanation of the scoring and rating criteria.

1.2 Quality Management System Requirements

Unless specifically exempt by Enovation Controls, the supplier is required to be registered to, compliant with, or working towards, ISO 9001, RoHS, REACH, Mercury or a quality management system such as ISO/TS 16949 (IATF 16949). If a Supplier is currently registered, then Supplier must maintain certification with an accredited registrar, and must furnish a copy of the registration certificate to Enovation Controls. If a Supplier is compliant to ISO 9001, but not certified by a

recognized third-party registrar, Supplier agrees to provide evidence of such compliance to Enovation Controls. If a Supplier is working towards its quality registration, then Supplier must provide, upon the request by Enovation Controls, evidence of such efforts and, upon receipt of its registration certification, inform Enovation Controls and furnish copies of its registration certificates. Suppliers are required to notify Enovation Controls should suspension or loss of certification and/or major system findings in their QMS from any 3rd party Registrar.

Enovation Controls reserves the right to schedule and conduct an Enovation Controls Supplier Assessment(s) (SQS or DCPA) at any time.

Regardless of quality systems registration status, suppliers must have an effective quality management system in place with adequate resources, to comply with all Enovation Controls Supplier Quality Requirements as noted in the Supplier Quality Guidelines / Terms and Conditions sections on www.Enovation Controls.com.

Direct suppliers are <u>required</u> to cascade these requirements to lower tiered suppliers throughout the supply chain, a practice often referred to as “flow down”.

In addition: *The following declarations are required for each FAI submission:*

California Proposition 65
ROHS (current version)
REACH (current version)
Asbestos free
Mercury free
Biocide status

2.0 Selection and Award of Business - NEW

Enovation Controls selects and awards business to suppliers through a cross-functional process utilizing a Module Assessment Team (MAT). Depending on the extent of the decision, the MAT may request input from Enovation Controls’ executive management. Criteria for selection and award include, but are not limited to, quality and warranty history, financial stability, competitiveness, and supply chain logistics.

SQS evaluations, CQI audit results when applicable, and quality management system certifications are inputs into supplier selection and award of business.

Suppliers will be categorized in specific levels. *See Attachment*

3.0 Part and Process Approval

3.1 Quality Planning

Enovation Controls requires all Suppliers to take ownership of, and manage, the Advanced Product Quality Planning (APQP[TM2]) process. During product and process development, suppliers are required to use a structured cross-functional approach. Use of the Enovation Controls APQP workbook to document the planning activity is recommended. Contact your Supplier Quality Representative for additional training or SCM to receive a copy and or a detailed explanation. During quality planning activities, controlled conditions are identified, implemented, and documented for the manufacture of Enovation Controls products. Suppliers must track progress and ensure on-time completion of critical items during the planning process.

Suppliers are required to use the APQP process to assure controlled conditions are developed and followed, for the duration of the part production cycle. Suppliers are required to conform to the techniques identified in the Automotive Industry Action Group (AIAG)[TM3] "core tools" (APQP, PPAP, MSA, SPC, FMEA), or equal standards such as VDA, to support planning and ongoing quality control efforts.

Suppliers must require APQP from their sub-contractors and have the records available for review by Enovation Controls.

Pass Through Characteristics (PTC) are required to be identified during the APQP activities. See section 3.6 in this manual for additional information.
New product launch quality planning documentation and activities must include a Safe Launch process, to ensure product conformance, if deemed applicable to the criticality of the part.

The Enovation Controls New Product Development (NPD) launch cycle includes a series of product builds. These builds are intended to evaluate assembly and supplier manufacturing capability, product quality, and readiness for Job 1 launch. Supplier readiness is evaluated through the PPAP process.

3.2 PPAP

Supplier Production Part Approval Process (PPAP) documentation defines the methodology and results which demonstrate compliance to Enovation Controls requirements. The AIAG PPAP Manual is the foundation of the PPAP process, but Enovation Controls may have requirements that take precedence over the AIAG publication, where differences occur.

In addition, certain Customer specific requirements could apply. The Enovation Controls Supplier Quality Representative will provide guidance as necessary. The submission level and the PPAP phase is dependent on the impact to the Enovation Controls plant, expected volume, supplier's manufacturing process, new part / new process, and risk of supplied part failure which would result in warranty costs. The Enovation Controls Supplier Quality Representative will provide guidance.

Suppliers are expected to do everything necessary to achieve full approval and meet Enovation Controls' PPAP requirements, prior to shipping the product to Enovation Controls. Enovation Controls recognizes situations exist where all elements of PPAP cannot be met, prior to part need, and additional work is necessary to achieve full approval.

Exceptions: Supplier Development reserves the right to facilitate or waive PPAP submissions for specific key components. In addition, will assure customer driven PPAP's are communicated and completed as required.

Should the supplier not have the capability to perform a full PPAP, at a minimum they will be required to submit a FAI (First Article Inspection) Package. The FAI requirements are listed in section FAI Inspection 3.2.2. As deemed necessary, Enovation Controls will work with the supplier to assist in improving their capabilities to attain the full PPAP levels within their system.

The Enovation Controls Supplier Quality Representative will review the PPAP submission to verify conformance to requirements are met. Suppliers are expected to resolve PPAP submission issues discovered during the review, in a timely manner. Suppliers are expected to plan for such possibilities and ensure PPAP does not prevent missed MRD (Material Required Date). Suppliers must

implement a 100% inspection process for part features or characteristics which do not meet the Enovation Controls requirements.

After review and acceptance of the PPAP submission, the Enovation Controls Supplier Quality Representative will sign the PSW indicating shipment of the part may begin.

Parts may be shipped to our facilities only after the supplier has received a copy of the signed Enovation Controls PSW or prior approval is received from SQ, and parts will be routed to NPR (quarantine) area at Enovation Controls.
See Packaging in the Purchasing Attachment

It is the supplier's obligation to refer any Enovation Controls personnel requesting shipment before PSW approval or prior shipment to the assigned Enovation Controls Supplier Quality Representative. It is the supplier's further obligation to refuse to ship until an approved PSW has been provided. Incomplete items require immediate corrective action and must be followed-up promptly with full approval submission.

The table below aligns each element of the Enovation Controls PPAP process:
Requirement by PPAP Elements (AIAG) and *Enovation Controls-Specific Requirements

1. Design Record - PO, Drawings, Material information, etc.
2. Engineering Change Documents, if any based on a PPAP requirement
3. Customer Engineering Approval – Evidence of Customer Approval
4. Design FMEA, if design responsible
5. Process Flow Diagrams
6. Process FMEA
7. Control Plan
8. Measurement System Analysis Studies
9. Dimensional Results
10. Records of Material/Performance Test Results
11. Initial Process studies
12. Qualified Laboratory Documentation
13. Appearance Approval Report (AAR), if applicable
14. Sample Production Parts
15. Master Sample
16. Checking Aids
17. Customer-Specific Requirements
18. Part Submission Warrant (PSW)

19. Pass thru Characteristics Analysis*

*Specific Requirement

3.2.1 PPAP Documentation

Suppliers are required to submit the Enovation Controls PSW for each PPAP level. Suppliers are encouraged to use the optional PPAP tracking form in the APQP workbook to monitor progress and align activity with expectations.

The default PPAP submission level is 3.

3.2.2 FAI First Article Inspection

Enovation Controls requires FAI for all new products, drawing revisions, supplier process changes, changes in supplier's manufacturing location, new or modified tooling, or packaging changes. This FAI is subsequent to the submission of PPAP documentation.

The supplier is required to submit the following for FAI:

- Quantity of parts requested for FAI
- Inspection data for the parts verifying conformance to print
- Material certification with part number and PO number clearly identified on document
- *Product Finish Verification*
- *California Proposition 65 Declaration*
- *RoHS and REACH Declaration*
- *Any additional data or information as requested by Enovation Controls as outlined in the Supplier Parts Requirements Checklist and Purchase Order details*

If the drawing requires the product to be RoHS and/or REACH compliant, the declaration will state the product is compliant. If the drawing does not require RoHS and/or REACH compliance, then the declaration will state the compliance status and list any chemicals and their percentages that are not compliant.

Suppliers are to submit the data electronically to their SCM and Supplier Quality Representative.

3.2.3 Record Retention

Suppliers shall maintain complete PPAP documentation, as specified in paragraph 3.2 PPAP. Suppliers must have a method to provide for safe and accessible

retention of all PPAP records for the production and service life of the part. PPAP records must be available for Enovation Controls review at any time.

All documents that are created as evidence of compliance to PPAP requirements must be submitted in English language, or the local language with English in parenthesis.

As noted in the AIAG PPAP Manual, Customer Notification, Table 3.1, significant changes, must be reported to Enovation Controls through the change management process prior to implementation, then submitted for PPAP approval, prior to shipping parts from the changed process or product.

All required PPAP documentation must always be maintained for parts in production.

PPAP records must be maintained for the life of the production part plus one year, unless contractual agreements specify otherwise.

3.2.4 Test Capability

Suppliers must have the capability, or outsource the resources necessary, to carry out the required layout, testing, material analysis, and certifications to generate needed records of conformance to requirements. This is inclusive of production intent, service, and prototype parts. Suppliers must retain complete test information with their PPAP documentation.

3.2.5 Measurement Systems

Measurement systems used for evaluation or qualification of Enovation Controls products must be “calibrated or verified, or both, prior to use and at specified intervals, against measurement standards traceable to international or national measurement standards.” (ISO 9001 7.6) Gauges listed on the control plan must be evaluated to determine measurement variability. This variability must be acceptable in accordance with the AIAG Measurement System Analysis (MSA) manual. These requirements extend to outsourced processes or external labs.

3.2.6 Tiered-Supplier Flow down

Sub-supplier materials and parts must be capable of meeting specifications required by the contractual requirements and design records and be verified

during PPAP to include PPAP approval of sub Tier services, components and assemblies. Sub-supplier's processes shall be monitored periodically to verify conforming parts continue to be produced under controlled conditions. Suppliers are responsible to flow down all relevant contractual and/or design requirements to their tiered suppliers.

3.3 Enovation Controls Drawings/Specifications

Suppliers must ensure Enovation Controls' requirements are defined and understood prior to acceptance of business. When any aspect of the requirements is not understood or agreed upon, suppliers must provide a written request for explanation of the unclear points to the appropriate Enovation Controls Engineer, the supporting Enovation Controls Supplier Quality Representative, and the Enovation Controls Procurement Representative. If no questions are raised, Enovation Controls assumes that suppliers understand the requirements, can meet the requirements, and will adhere to them.

3.3.1 Engineering Specifications

Suppliers are required to comply with the applicable Enovation Controls engineering specifications. Enovation Controls Engineering is the approved source for obtaining copies of engineering specifications.

Outsourcing of processes does not absolve the supplier of its responsibility to conform to all requirements specified in the applicable Enovation Controls engineering specifications.

3.4 Process Failure Mode and Effects Analysis – PFMEA

A PFMEA is an active document which describes the risks to the production process and/or parts produced, and identifies actions taken to mitigate the risks, such as process controls. In preparation and maintenance of, refer to the AIAG FMEA manual for guidance.

PFMEA inputs must include warranty issues, customer concerns and lessons learned, and address past Global 8D concerns. It should flow from the DFMEA, if available, for the part or part family. The PFMEA must be reviewed with Enovation Controls to ensure it is current and complete. A single PFMEA may be

acceptable for a family of parts when approved by the Enovation Controls Supplier Quality Representative.

Control Plans (as discussed below) should reflect the results of both DFMEA and PFMEA development.

3.5 Control of Special Characteristics

Special characteristics, such as KCC, KPC, CC, and SC[TM4], may be designated on Enovation Controls' drawings, engineering standards, design requirements documents (DRD), DFMEA, PFMEA and/or other product documentation. These characteristics indicate if government, safety, environmental regulations, or product function are affected. The requirements stated below must be met for designation, documentation and additional control.

The appropriate symbol must be included on all related documents (including control plans, FMEAs, work instructions and process control documents) for the operations which produce special characteristics. Unless otherwise specified by Enovation Controls, initial process study results for special characteristics must demonstrate stability and a minimum capability index (Cpk) of 1.67 to be acceptable. Acceptable initial process study results must be demonstrated and submitted on request for each special characteristic and for any other characteristics requested, using the calculations defined in the AIAG Statistical Process Control manual. If an acceptable Cpk cannot be demonstrated, the assigned Enovation Controls representative will be notified prior to PPAP submission and corrective action must be submitted for approval. Typical corrective actions include such alternative control methods such as mistake proofing (preferred) or 100% testing or inspection. See the AIAG PPAP and SPC Manuals for further guidance.
Suppliers must ensure their personnel understand the significance of special characteristics, and their necessary impact on manufacturing processes and support functions. Enovation Controls expects that personnel working with operations affecting special characteristics understand what the special characteristic(s) in their operation means, the part function, and the impact of failure to Enovation Controls or its customer.

If Enovation Controls has not defined special characteristics for supplier part(s), it is the supplier's responsibility to identify any special characteristics needed because of the supplier's DFMEA and PFMEA activity.

3.6 Pass Through Characteristic – PTC

Pass Through Characteristics are part characteristics which are not controlled, or functionally tested anywhere downstream in the supply chain, are ultimately supplied to an OEM customer (e.g., it will "pass through") and would have a significant impact on customer satisfaction and/or warranty. A PTC may or may not be considered a Special Characteristic.

Enovation Controls' approach to pass through characteristics meets the minimum requirement defined in AIAG CQI-19 by using the definitions below. Characteristics must have a PFMEA Severity greater than 4 to be considered.

- Pass Through Characteristics (complete pass through) = PFMEA Detection of 10. A characteristic that will not be detected at any point prior to being delivered to the Enovation Controls plant.
- Weak Detection (WD) (may pass through) = PFMEA Detection of 6-9. A characteristic that does not have robust detection and might not be detected at any point prior to being delivered to the Enovation Controls plant.
- Potential PTC – A characteristic which has no detection within the manufacturing supplier (PFMEA Detection of 10) and has not yet been reviewed to see if it passes through subsequent tiers of the supply chain.
- Potential WD – a characteristic which does not have robust detection within the manufacturing supplier (PFMEA Detection of 6-9) and has not yet been reviewed to see if it passes through subsequent tiers of the supply chain.

The Tier 1 supplier is responsible for identifying pass through characteristics and working with their Enovation Controls Supplier Quality Representative to put controls in place for those characteristics. The supplier and Enovation Controls must reach an agreement on the proper method of control for the identified PTC. Suppliers must complete and submit the PTC Form as part of the APQP and completion is verified as part of the Enovation Controls PPAP approval process.

PTC symbol “P” must be noted on PFMEA and Control Plan, and the characteristic controlled with mistake proofing or other suitable means of protecting the Enovation Controls plants and customers.

3.7 Manufacturing Under Controlled Conditions

3.7.1 Control Plan

Control plans identify important part and process characteristics defined during APQP activity, and the control plan must reflect ongoing changes to PFMEA, such as those resulting from corrective action and process improvement. Changes require PPAP re-submission before product is shipped from the revised process. The control plan and PFMEA are living documents; always reflecting current controls and measurement systems in use. They must be updated as control methods and measurement systems are changed, improved and are to be audited periodically as part of the supplier’s internal audit process to assure continued effectiveness. Unless otherwise exempt by the Enovation Controls Supplier Quality Representative, suppliers are expected to use the control plan format or compliant to the referenced in the AIAG APQP manual.

3.7.2 Job Set-up Verification

Suppliers are required to have a process to verify that the manufacturing job is set up properly. Inspection of the first good piece is a method to achieve verification, along with use of statistical methods, where applicable. In production lines with frequent part changes, a last-off inspection is also recommended for each run.

3.7.3 Identification and Traceability

Suppliers must identify an Enovation Controls product by suitable means through the manufacturing process and in all inventory locations. Suitable means may include cards, tags, signs, lot numbers or bar codes.

The status of the product must be identified to mitigate the risk of a suspect, nonconforming, or unapproved product being used or shipped to Enovation Controls.

The depth of traceability required must be considered for each part and the amount of detail recorded must be related to the risk. Traceability considerations include permanency and legibility.

3.8 Records

The supplier must maintain routine quality data (e.g., quality indices updates, reliability test results, traceability, etc.) that are required by the design specifications, agreed to during APQP, or established as part of a corrective action plan. Such data shall be made available upon request.

The supplier must maintain capability data for all customer- or supplier-designated “special characteristics” and make capability information available upon request. In some cases, suppliers will be required to provide capability on a routine basis (e.g., monthly). The Enovation Controls Supplier Quality Representative will provide guidance in such situations.

All product and process records must be dated, legible, and identify the person who created the record. Records are to be maintained for the life of the product plus one year. Specific contractual requirements will take precedence over these guidelines.

3.9 Equipment Maintenance

The supplier’s production process shall be planned, maintained and monitored to assure process capability is understood and controlled. Production equipment must be maintained in a way that minimizes unplanned downtime, process variation and potential disruption of parts to Enovation Controls.
The supplier’s maintenance system must ensure that:

- Spare parts are readily available for critical manufacturing equipment
- Predictive maintenance methods are utilized
- Enovation Controls-owned tooling and equipment is identified, maintained and preserved.

3.10 Prototype Parts

Prototype parts must be inspected and validated to certify they meet the design intent.

For parts that are made using a production process and then modified or hand built, the requirement for verification before delivery is set forth in the Level 4 PPAP requirements. Parts that are made using a production process and then modified or hand built, must be shipped under deviation and visibly identified. Parts that are delivered as prototype parts must be inspected and validated to certify they meet the design intent.

Prototype parts must be visibly identified with container signage stating "prototype parts." Individual parts must be identified to prevent mixing with production parts when removed from the container, where required.

3.11 Manufacturing / Assembly Tools and Fixtures Management

Suppliers must establish a system to track and manage the Enovation Controls-issued tools, assembly tools, assembly fixtures and gauges. Individual tool and fixture information shall be readily available and provided to Enovation Controls upon request.

Following are the requirements of the tools and fixtures management system:

- Label and track each Enovation Controls tool and fixture with unique identifiers
- Ergonomic storage and retrieval system
- Tool and fixture change, repair, calibration and audit schedules
- Record keeping of wear, repairs, calibrations and compliance to QMS
- Startup Shutdown audit records

3.12Tiered Supplier Quality Assurance Management

Tier I suppliers are expected to manage sub-tiered suppliers to the same contractual requirements as they agreed upon with Enovation Controls.
Tier I suppliers are expected to review, and disposition sub-tier submitted APQP /PPAP documents, and ensure all Enovation Controls requirements are met.
Tier 1 suppliers are expected to monitor the sub-tier supplier's performance on quality, delivery and other customer satisfaction metrics. If sub-tier suppliers fail to meet the Enovation Controls requirements, the Tier I is expected to notify Enovation Controls, and work with the offending sub-tier supplier to improve performance. In cases where remediation efforts have been completed, and

attempts to improve the performance have failed, the Tier I supplier is expected to work with the Enovation Controls Procurement team regarding the Enovation Controls intervention and/or exit plan.

4.0 Concern Management

When problems arise, suppliers are expected to contain the problem and respond rapidly with permanent corrective action on non-conforming material.

4.1 Rapid Response

Enovation Controls will notify the supplier when non-conforming parts are discovered at Enovation Controls, or a customer location. Immediate containment of suspect material is required for all parts as a response to any customer concern. Containment must address all suspect parts throughout the supply chain, including:

- Parts at the supplier locations, warehouses or in-transit between locations,
- Parts in-transit to Enovation Controls or their usage locations,
- Parts on the production floor at Enovation Controls usage locations,
- Parts supplied as service parts.

A description of the containment method and the resulting certified product identification method must be provided to the Enovation Controls Supplier Quality Representative.

Suppliers are responsible for coordinating the appropriate activities to identify and quarantine suspect material, record the containment results, and communicate to the appropriate parties when the activity is complete. A “clean point” with the first known conforming part must be communicated to the Enovation Controls Supplier Quality Representative.

Enovation Controls may initiate sorting of supplier parts when there is evidence of suspect material in the supply chain. Suppliers are responsible for all sorting activities prior to the point of application and will support Enovation Controls with the sorting activities after point of application.

Suppliers are expected to perform all actions needed to return and replace suspect material and avoid, wherever possible, shutdown of Enovation Controls manufacturing facilities. Enovation Controls reserves the right to charge back the costs associated with supplier caused non-conforming product, including return of material. (*See Recovery Fees Attachment for specifics*)

If a supplier discovers that they have shipped, or may have shipped, nonconforming parts, the supplier must notify the Enovation Controls manufacturing location and the Enovation Controls Supplier Quality Representative immediately. The supplier must manage all aspects of the communication to prevent impact to Enovation Controls.

4.2 Appropriate Corrective Action

Enovation Controls Supplier Quality Representatives, engineering locations, and parts distribution centers communicate non-conformances found directly related to suppliers with requests for corrective action. Suppliers must address containment and corrective action requests in a timely manner and correct issues to the reporting location's satisfaction.

4.2.1 Global 8D

The Global 8D (G8D) reporting process is the standard for issue resolution at Enovation Controls. Suppliers must contact their Supplier Quality Representative to address all G8D issues requiring action, including pre-production issues and issues where only a single defect is found. Corrective actions must include a formal answer of the issue and use of all the G8D process steps. A new PPAP package with an Enovation Controls PSW may be required because of corrective actions taken.

Suppliers are expected to take ownership of the process, lead root-cause investigations, and report on a timely basis, as required by the assigned Enovation Controls Representatives. Suppliers must maintain visibility of the G8D until it is closed and approved by Enovation Controls. Suppliers are expected to obtain training in G8D methodology, if needed.

Enovation Controls can and will provide training in G8D methodology should the supplier have the need for assistance.

Suppliers are rated on timeliness of the corrective action responses. These metrics are indicated on the Supplier Performance Scorecard.

Within 24 hours of notification, suppliers are expected to complete actions through step D3 of the G8D process. This step includes defining containment actions, coordinating with Enovation Controls and implementing containment. Other interim containment actions (ICAs) should also be implemented during this time.

Within 14 calendar days of notification, suppliers are expected to complete actions through step D5 of the G8D process. This step includes choosing and verifying permanent corrective actions (PCAs) for root cause and escape point. Complete closure of the G8D is dependent on the severity of the problem and complexity of the permanent corrective actions required. Suppliers are expected to maintain open communication with the Enovation Controls Supplier Quality Representative to ensure all steps of the G8D process are completed accurately, timely and appropriately.

4.2.2 3 Legged 5 Why

Enovation Controls requires suppliers to use the 3 legged 5 Why (3L5W) problem solving tool in conjunction with each G8D. 3L5W is a technique used to create a detailed explanation of where, when, and how the problem occurred, by evaluating three separate areas which could have contributed to the problem.

The purpose of the 3L5W is to arrive at the root cause level, where the failure chain ends at the symptom, or effect, experienced by the customer, and results in three separate conclusions for improvement. Corrective actions shall address all three legs.

Problem solvers ask the question “Why?” five times successively, for each leg of the 3L5W analysis. The root cause will generally present itself by the 4th or 5th Why. Each “Why” must be supported by data, or fact. The known and collected facts from each “Why” lead to the next “Why”, as the process continues, concluding when the root cause is found. Actions are typically taken on the last “Why” for each Leg.

The three legs are:

- Specific Problem (Why was this non-conformance created?)
- Detection (Why did this non-conformance reach the customer?)
- Systemic (Why did the system allow the non-conformance to occur?)
- Prevention of future problems are addressed in all three legs, with the following:
    - Avoidance of the specific root cause through SPC (Statistical Process Control and Process Capability) or Error / Mistake Proofing (Poka Yoke)
    - Establishment of Standard Work Practices to maintain consistency

Contact the Enovation Controls Supplier Quality representative for additional guidance and a copy of the 3L5W template.

4.3 Use of Alternate Process

Suppliers must assure PPAP approved processes are not changed or bypassed due to equipment malfunction or any other reason. If such need arises, an effective alternate process must be established and qualified.

Use of alternate processes requires appropriate controls to protect against quality issues. Documentation of the event and countermeasures for use of the alternate process are required.

4.4 Return Material Authorization (RMA) Policy

All Enovation Controls suppliers must comply with the following Enovation Controls Return Material Authorization (RMA) policy. Suppliers will have 5 calendar days to respond to a request for an RMA number.
If the supplier does not respond within 5 days:

- The material will be scrapped
- The material cost will be charged-back to the supplier

All information necessary to return domestic or global parts must be provided by the supplier.

5.0 Change Management

5.1 "Controlled Conditions" for Parts and Processes

Parts received by Enovation Controls must always be produced by a production process approved by a Part Submission Warrant or Deviation. Suppliers must not ship and will not be paid for shipments made without an approved PSW. Supplier PPAP documentation should always reflect the current process, and the process as approved by Enovation Controls.

Suppliers and sub-suppliers, regardless of design responsibility, must notify Enovation Controls of all intended changes. Enovation Controls will respect proprietary products and processes. Suppliers must not change the approved production process without prior written authorization by Enovation Controls. Enovation Controls requires customer notification using a Supplier Request for Engineering Approval (SREA) and subsequent PPAP approval for all changes as identified in the AIAG PPAP manual.

5.2 Permanent Part/Process Change Request

If a supplier wants to make a permanent change to a current production already PPAP approved part or process, a request must be submitted to and approved by Enovation Controls, before the change is made. The Enovation Controls Supplier Request for Engineering Approval (SREA) form, located on www.Enovation Controlssupplier.com website must be completed and submitted to the applicable Enovation Controls Supplier Quality Representative.

NOTE: SREAs are not to be used at time of quote, during new product launch phase, for cost reduction opportunities, or for emergency situations (such as termination of tier supplier relationships or to address changes already in process - i.e., a forced change). During these stages, the supplier is expected to work with the Enovation Controls Supply Manager and Engineering, and if the change is accepted by Enovation Controls, release, contract and PPAP must be completed before the supplier implements the change. Deviation will be required for immediate need situations.

Enovation Controls recognizes a change to a current stable and capable validated process may result in unanticipated variation in the new process, and loss of the initial validated baseline. To counter that and to mitigate negative impacts,

suppliers who request process changes for critical parts listed or defined on part drawings, are required to do the following:

- Conduct a level 5 Exit PPAP from the old process
- Provide a 3D CAD overlay comparison of a part produced on the old process with a part produced on the new process
- Conduct level 5 PPAP on the new process

In addition, suppliers are required to implement and execute a run at rate and PPAP approval Safe Launch plan for product/process transitions, including but not limited to, additional shifts added and/or use of same tools and/or techniques from a previously PPAP approved facility.

If an SREA is rejected, the supplier cannot move forward with the proposed change.

If a product change SREA is approved, the supplier must wait for the resulting engineering change release and PPAP approval, before shipping the product. Suppliers are expected to follow the APQP and PPAP processes to implement the change.

If a process change SREA is approved, the supplier is expected to follow the APQP and PPAP processes to implement the change and schedule a PPAP review with the Enovation Controls Supplier Quality Representative. Suppliers must not ship product from a changed process prior to PPAP approval.

6.0 Performance Management

6.1 Performance Evaluation and Communication

Enovation Controls provides frequent and ongoing feedback to each supplier in the form of an Enterprise Supplier Performance Scorecard. The Scorecard is intended to encourage excellence in terms of Commercial Expectations, Quality, Delivery Compliance and Service.

Suppliers with exceptional performance are rewarded and recognized with the Enovation Controls Supplier Award. Suppliers are selected for this award by cross-

functional team input based on supplier performance in quality, warranty, technology, delivery, service and cost.

6.1.1 Supplier Quality Review – SQR

Enovation Controls communicates unsatisfactory performance in the Scorecard or other methods, and the supplier may be required to attend a Supplier Quality Review (SQR). During the SQR, the supplier's senior management and Enovation Controls executive management discuss the expectations of Enovation Controls and the supplier's performance. Immediate systemic corrective action and recommitment to Enovation Controls expectations is the desired outcome of the SQR.

6.1.2 30/60/90 Day Action Plan

An output from the SQR may include a 30/60/90-day action plan for improvements. The format details the implementation plan and the specified time frame. The Enovation Controls Supplier Quality Representative will help develop the plan, monitor the progress towards completion, and evaluate the effectiveness of the actions taken.

When a supplier cannot immediately meet Enovation Controls' expectations, goals, targets, and timelines are mutually established between Enovation Controls Supply Chain, the Procurement Representative and the Enovation Controls Supplier Quality Representative. These goals and targets are continually measured and evaluated until the supplier eventually meets the expectations. If expectations cannot be reached in the mutually agreed upon timeframe, the Enovation Controls Supply Chain, Procurement Representative and Enovation Controls Supplier Quality Representative will re-evaluate the commercial relationship and take appropriate action.

6.2 Supplier Scorecard

Enovation Controls issues a Supplier Performance Scorecard on a monthly basis. Suppliers are expected to access their scorecard which is available on www.Enovation Controlssupplier.com to view the results from the previous time period. A Scorecard Coordinator has been designated as the initial point of contact for all inquiries regarding the scorecard, including all reconciliations.

6.2.1 Delivery Performance

Enovation Controls tracks and reports the delivery performance of all suppliers. Scorecard evaluation criteria include:

a. Late Delivery - %
b. Critical Part shortage/past due resulting in delayed sales orders exceeding $15k
c. Number of Lines late
d. Expedited freight cost
e. SCM to review cause case by case

6.2.2 Part Quality Performance

Part quality problems will typically be handled through the Corrective Action Global 8D process. The supplier's quality performance is measured in several ways including:

a. PPM Level
b. Quantity of NR's – Monthly quantity
c. Warranty Returns – WRFA/ CAR/NR – Monthly quantity
d. Impact to the overall business - $$
e. Impact to point of application (Enovation Controls)
f. Excessive sorting – in plant/inventory
g. Offline rework
h. Impact to point of application/CPPM (Final Customer, Field, Customer Dissatisfaction)
i. Days to D5

6.2.3 Scorecard Review

Scorecards will be reviewed on a monthly basis. There will be an emphasis on Bottom Suppliers who fall below the thresholds of:

- Delivery < 80%
- Quality >1000 PPM for the month.

A Supplier Corrective Action Request (SCAR) will be written in most cases for all the suppliers that made this list based on performance. This exercise is preventative with the anticipation of heading off any repetitive issues. Enovation Controls encourages you as the supplier to do the same and/or a similar process with your suppliers.

6.3 Field Performance

Part performance quality is monitored after delivery to the Enovation Controls customers through warranty claims. Warranty data is analyzed and reviewed during continuous improvement meetings to drive continual design improvement. Suppliers may be engaged in containment, resolution, and prevention activities to the extent appropriate as determined by the Enovation Controls Quality, Supplier Quality, Engineering, Supply Chain and/or Procurement functions. Urgency in resolution is always expected.

Suppliers are expected to warranty the product purchased by Enovation Controls in alignment with Enovation Controls' standard warranty, three years from Enovation Controls' manufacturing date. Enovation Controls' standard warranty is two years from date of manufacture of the Enovation Controls product. In the event of product failure or non-conformances related to a supplier's product the supplier is expected to provide root cause analysis and corrective action in addition to all cost to correct or replace the non-conforming product. The Supplier may be debited for recovery of the labor and material costs incurred by Enovation Controls. The Supplier is responsible for ensuring compliance with all governmental regulations

Any questions regarding field performance may be directed to the Enovation Controls Supplier Quality Representative or Customer Quality.

6.4 Supplier On-going Performance Management

6.4.1 Internal Audit Program

Suppliers must have an internal audit program to verify conformance to their quality management system and ensure it is effectively implemented and maintained. Enovation Controls expects suppliers to perform planned system,

manufacturing process, and product audits. The supplier must take internal corrective action without undue delay when non-conformances are detected.

To ensure compliance, suppliers are encouraged to incorporate the DCPA audit in their internal audit program (Reference section 3.7.1 Control Plan).

6.4.2 Management Review Expectations

Suppliers are expected to review Enovation Controls-provided performance metrics in their management review process. These performance metrics include quality, delivery, support and service which are included on the Enovation Controls Enterprise Supplier Performance Scorecard.

The senior management team of the supplier organization is expected to review and respond to Enovation Controls scorecards, corrective actions, and Enovation Controls Supplier Assessments (SQS) actions. Senior management must assure any required action is taken in a timely and effective manner.

6.4.3 Contingency Plan

Suppliers must develop a documented contingency plan to mitigate the potential negative impact to Enovation Controls. At a minimum, the contingency plan must address part non-conformances, component or material shortages, equipment failure, utilities interruptions, and manpower issues. The plan must also include an extended shutdown / startup process utilizing the Enovation Controls Shutdown Startup Process. Suppliers are required to ensure flow down of this extended shutdown / startup process throughout the tiered supply chain.

6.4.4 Dynamic Control Plan Audit – DCPA

The Enovation Controls Dynamic Control Plan Audit (DCPA) is a formal examination of production realization controls. The audit includes a review of documentation, manufacturing processes, final inspection and shipping. Enovation Controls reserves the right to conduct a DCPA audit at the supplier location at any time. The activities, inputs and outputs of the manufacturing process must be those approved during PPAP. To ensure compliance, suppliers are encouraged to incorporate the DCPA audit in their internal audit program. Based on the scoring assessment, the supplier is expected to achieve an “A” classification. Suppliers are expected to take immediate action for a classification less than “A”, or for DCPA line items receiving a six or less rating. Enovation

Controls expects non-conformances to be addressed immediately to reduce the risk of outflow of non-conforming product.

7.0 Status Management

7.1 Controlled Shipping

Suppliers are always expected to remain in good standing and provide resources necessary to protect Enovation Controls operations from non-conforming product impacts. When situations occur which adversely affect Enovation Controls business, Enovation Controls reserves the right to initiate the controlled shipping process.

Controlled shipping can be initiated when a situation meets one of the following criterions:

- Failure to resolve a defined non-conformity
- Broken containment of a previously identified non-conformity
- Suspected safety hazard to the Enovation Controls-using plant or carrier
- Unauthorized change to a part or manufacturing process
- Other non-conformity situations as deemed necessary by Enovation Controls.

A formal notification letter is sent to the supplier when placed on controlled shipping. Suppliers remain at the controlled shipping status until:

- Permanent corrective action has been proven effective
- All exit criteria detailed in the notification letter has been met
- Formal exit letter has been received.

7.1.1 Controlled Shipping Level 1 – CS1

CS1 requires the supplier to implement an offline part containment process, and report results to Enovation Controls. The inspection personnel must be independent of the approved production process flow. The supplier is responsible for all costs associated with the CS1 activity.

7.1.2 Controlled Shipping Level 2 – CS2

If the CS1 containment is determined to be ineffective, Enovation Controls formally initiates CS2. CS2 requires third-party inspection, utilizing an offline containment process. The supplier is responsible for all costs associated with the CS2 activity.

If performance does not improve, supplier's future business with Enovation Controls may be impacted.

7.1.3 Controlled Shipping Exit

Enovation Controls removes the supplier from controlled shipping status when the supplier has met the controlled shipping exit criteria and continues to supply parts that meet Enovation Controls requirements.

7.2 Quality Top Focus – QTF

Suppliers unable to reach an acceptable performance level within the CS2 activity or other extenuating circumstances deemed critical may be placed on Quality Top Focus Program. During this step, Enovation Controls senior management engages with the supplier and the supplier is required to participate in a specified list of remediation activities to improve quality performance. The Enovation Controls team works with the supplier to determine these activities and monitors progress closely.

The QTF process escalates the awareness of poor performing suppliers throughout Enovation Controls. Supplier's performance must improve to an acceptable level to be removed from this status.

7.2.1 QTF Entry Criteria:

Suppliers may be nominated for QTF status if any of the following criteria are met:

- 5 G8Ds accrued in a 12-month time frame
- Impact to Point of Application (POA) due to high PPM, in plant sorting, offline rework and inventory, in-transit disruption, warranty failure and/or uptime erosion
- Supplier caused quality impact and resulting in Ship Hold at Enovation Controls plants.

- Supplier whose Controlled Shipping CS1 / CS2 actions are not effective to assure quality of parts
- Unauthorized changes

7.2.3 QTF Exit Criteria:

Suppliers can exit the Quality Top Focus status by implementing, documenting, and obtaining signoff from the Enovation Controls Supplier Quality Manager on the following exit criteria.

- Nomination of an executive champion
- Notify supplier ISO/TS registrar of Enovation Controls Quality Top Focus status.
- Complete PTC workshop, and identify PTC / WD & countermeasures
- Implement Shutdown / Startup process
- Downward trend on PPM & 8Ds over minimum 3 months' time period
- 30/60/90-day action plan tracking (3 panel tracking of failure modes)
- Resolve systemic labeling issues if applicable
- Ship Hold Elimination if applicable
- SQS with no open deficiencies (no question score with 6 or less)
    - If supplier has been grandfathered in, will need to pass the SQS

7.3 New Business Hold

Suppliers who have one or more of the following offenses may be placed on New Business Hold.

- Poor Progress to QTF exit plan
- Unauthorized changes
- Chronic quality issues / Ship Hold /Severe Commercial Issue

Attachment – Recovery Fees

Policy Statement: Enovation Controls reserves the right to recover justified expenses from suppliers for performance issues related to quality and delivery issues.

It is important for us to maintain and sustain a productive working relationship with our supplier partners while ensuring justified expenses to Enovation Controls are recovered. Reimbursement of the following expenses may be requested from a supplier at the full rate shown or at a lesser rate (shared responsibility) as determined by Enovation Controls.

- Reject Labor for rework, sorting, screening ($100/labor hour)
- Lost Production Labor-Down Time ($50/labor hour)
- Supplier Corrective Action Request (SCAR) Non-Compliance ($500 + Potential Supplier Audit Costs)
- Expedited Shipments / Extra Shipments (extraordinary shipment costs)
- U.S. Customs Penalties (costs incurred)
- Quality Assurance Travel Recovery ($500/day)

REQUEST FOR RECOVERY PROCESS

1. An event occurs where justifiable expenses are incurred by Enovation Controls.
2. The Request for Recovery Fees is assigned to Enovation Controls Supply Chain Manager.
3. The Enovation Controls Supply Chain Manager issues the Request for Recovery Fees to the responsible supplier.
4. The supplier has 30 days to contest the request.
5. Only Enovation Controls Supply Chain may negotiate the recovery fees.
6. After 30 days, unless otherwise agreed to, Enovation Controls will process the appropriate debit.
7. Enovation Controls management is responsible to exercise sound judgement throughout the process.

RECOVERY FEES

Accumulation of Rejection Parts

Due to the processing cost of NRs, if less than $50.00 is generated per part number per day, the parts may be scrapped at Enovation Controls without notification to the supplier. Enovation Controls Quality Assurance Department reserves the right to initiate an NR if less than $50.00 is generated per part number per day if quantity and/or nonconformance warrants an NR. Suppliers may be debited on a periodic basis (annually or less) for accumulations of all rejected

material. The supplier agrees that when parts are scrapped at Enovation Controls, parts need not be returned to the supplier.

Reject Labor = $100.00 / Hour

If defective material or parts are discovered or suspected, and the discovery is expected to impact Enovation Controls quality or production, Enovation Controls reserves the right to apply labor resources to the sorting, screening or rework of the subject parts. Reject labor charges are used to account for the actual resources used.

Example: 4 people x 4 hours = 16 total labor hours x $100 / hr. = $1600 debited

NOTE: Reoccurrences on the same part will be subject to higher sorting fees.

Production Down Time = $50.00 / Hour

Down time charges are used to account for lost production labor when the production line is interrupted due to rejects, shortages, late deliveries, etc. (may not result in actual loss of finished units). The recovery fee is equal to the total production labor hours lost (accumulation of people and hours) and may be more than any lost production charges.

Example: 23 people x 2 hours = 46 total labor hours down time x $50 / hr. = $2,300 debited

Lost or Delayed Production = $200 / Unit

Lost or delayed production charges are used when production capacity is lost, or production schedules cannot be met due to the receipt of defective material, late deliveries, or part shortages. The recovery fee is equal to the total number of units lost during the down time at the normal prevailing production rate and may be more than any down time charges. The debit amount does not include potential sales opportunity losses, increased inventory carrying costs, exposure to obsolescence, or fixed overhead.

Example: 27 units lost capacity x $200 / unit = $5,400 debited

Supplier Corrective Action Request (SCAR) Non-Compliance ($500 + Potential Supplier Audit Costs)

Corrective Action Requests are sent to suppliers in the event of significant nonconforming parts/materials received by Enovation Controls. We will request an immediate response on

containment actions and a longer-term response on permanent actions (response due to Enovation Controls within 30 days of event). If a supplier does not respond to the request by the designated date you could be charged, and the part/materials will be put on Quality Alert. Additional noncompliance will result in a Supplier Quality Audit at the supplier's expense or a loss of continued business for the given parts involved. Failure to resolve outstanding SCAR non-compliances could result in additional charges of $1000/week.

Expedited Shipments / Extra Shipments = Actual Costs Incurred

Expedited shipment charges are used when Enovation Controls incurs additional or extraordinary transportation and logistics costs when a supplier delivery failure is imminent, and Enovation Controls must attempt to complete the scheduled supplier delivery on-time to avoid production down time or lost production. The supplier may be debited for the actual cost of the expedited shipment.

Extra shipment charges are used when Enovation Controls incurs additional or extraordinary transportation and logistics cost due to a supplier's failure to meet the normal scheduled pick-up. This may include charges from the carrier for truck ordered but not used, extra stop charges, extra or multiple truck charges. The supplier may be debited for the actual cost of the extra shipment above the normal shipment cost for the scheduled delivery.

U.S. Customs Penalties

Enovation Controls is subject to fines, penalties or excess duties from the U.S. Customs Department, and possibly the loss of product, for the improper importation of product into the United States. Custom penalty charges are used when an excess cost or loss is incurred by Enovation Controls and it is determined that the cause of the excess cost or loss was a failure induced by the supplier. The supplier may be debited for the actual value of the excess costs or loss incurred by Enovation Controls. [TM5]

Quality Assurance Travel Recovery ($500/day)

In the event an Enovation Controls employee(s) visits a supplier/customer to perform an audit of discrepant product the supplier could be responsible for a COPQ charge of up to $500/day, per employee.

Attachment – Supplier Ranking

Supplier Ranking

Level 1 / Significant Suppliers
Critical suppliers have a significant impact to product quality, and supplier issues from these suppliers could result in recalls, registration hold letters and/or customer issues. These are the suppliers that require the most amount of attention; metrics and monitoring should be a continuous part of supplier controls for these vendors.
Supplier Examples: LCD, Plastics, Electronics

Methods of Qualification: Supplier Surveys, Quality Agreement, NDA, Certifications, On-site Audits, Annual re-evaluation

Level 2 / Moderate Suppliers
Moderate-level suppliers have a direct impact on product quality, and supplier issues from these suppliers could potentially cause voluntary recalls and/or moderate risk to the customer. These suppliers often provide custom parts that are not found off-the-shelf.
Supplier Examples: Testing facilities, Packaging material, Custom-designed parts, etc.

Methods of Qualification: Supplier Surveys, Quality Agreement, NDA, Certifications (optional), As needed re-evaluation

Level 3 / Non-Critical Suppliers
These suppliers have minimal effect on product quality or are sometimes large distributors that supply off-the-shelf goods. Note: to qu[TM6]alify large distributors they may not even want to fill out a supplier survey.
Supplier Examples: non-critical screws/fasteners, tools, prototyping facilities (these may become significant suppliers when prototypes become production-level), R&D equipment

Methods of Qualification: Supplier Surveys

Level 0 / Minor Suppliers
These suppliers are ones that do not affect product quality. These suppliers often do not even have an associated supplier file or have any requirements.
Supplier Examples: Office supplies, etc.

Methods of Qualification: None

Attachment – Purchasing

Terms and Conditions
Each Enovation Controls purchase order outlines the Terms and Conditions of the purchase. Acceptance of the purchase order implies acceptance of the policies and procedures outlined in this manual. Questions about the Terms and Conditions should be directed to the appropriate Enovation Controls Buyer or Supply Chain Manager (SCM).

Purchase Order Execution
Enovation Controls Production Purchase Orders are released through an automated delivery system. PO Releases are delivered via e-mail or fax. Suppliers must provide a primary e-mail address or fax number for this purpose.

Purchase Order Acknowledgement
Upon receipt of a purchase order, Supplier is to acknowledge the Enovation Controls Dock Date, Quantity, Pricing, Drawing Revision *and any other notes or instructions* called out on the PO as directed on the bottom of the PO form via e-mail or fax. Exceptions to the PO requirements must be reconciled with the Buyer as directed on the PO form. See below for further information on pricing expectations.

Purchase Order Pricing
Suppliers are expected to continually manage, contain, and reduce costs. Any exceptions to the established pricing as documented on the PO are subject to Enovation Controls' procedural requirements that compel justification and approval by the Buyer and/or SCM prior to acknowledgement of the PO.

Communication with Enovation Controls
Enovation Controls seeks to utilize rapid, accurate methods of communication. Electronic communication capability at our supplier is used to enhance our business processes and is a measure of delivery performance.

The supplier's primary contact at Enovation Controls is their Buyer, SCM and or Supplier Quality Representative.

Communication of PPAP, material certifications, inspection reports and other requested quality documents should be e-mailed to both the SCM, Supplier Quality Representative and[MH7] Supplierinfo@enovationcontrols.com

Communication with Enovation Controls US facilities must be in English.

Packaging

The supplier is responsible for the development of packaging for their products. Products are to be packaged so they are received undamaged and suitable for use in subsequent operations without rework or repair.

Packaging should be standardized, and any proposed changes reviewed with the Enovation Controls SCM.

Packaging should also be designed to minimize air in the container and minimize the use of packaging materials such as foam, bubble wrap or peanuts. Coated surfaces shall be protected to protect the parts from scuffing, scratches, nicks, abrasions and other damage.

Parts are not to be stacked on top of each other without insulating material. PCB assemblies shall be packaged in Electrostatic Discharge, ESD, bags. Each anti-static bag must be protected by bubble-wrap, foam sheets, or other cushioning material.

The weight of containers should be 25 lbs. or less. Only one-part number is allowed per container.

All PPAP samples are to be packaged separately for identification. The boxes need to have “PPAP Samples” on bold print placards. The placards are to be a brightly colored sheet of paper, at least 8 inches by 11 inches in size, must be attached to at least 4 sides of the container or material. Specifically, on the placard the Supplier Identification, Part Number, Engineering Level, and Quantity must be clearly displayed on the part-packaging label to ensure easy, visible segregation of containers/parts.

The sample boxes can accompany the new shipment, but with the understanding the production parts will not be used until an approved PSW is signed and returned to the supplier.

Glossary

Advanced Product Quality Planning (APQP) – structured method of defining and establishing the steps necessary to ensure that a product satisfies the customer.

Calibration – a set of operations which compares values taken from a piece of inspection, measuring and test equipment or a gage to a known standard under specified conditions. (PPAP)

Capability – the total range of inherent variation in a stable process. (PPAP)

Clean Point – exact point in the production stream with the first known conforming part after the manufacture of nonconforming parts.

Control Plan – written description of the system for controlling production parts or bulk materials and processes. They are written by organizations to address the important characteristics and engineering requirements of the part. (PPAP)

CQI Special Processes – Continuous Quality Improvement Standards published by The Automotive Industry Action Group (AIAG). The standards are listed in the appendix of ISO TS 16949 (IATF 16949).

Customer Requirements: All requirements specified by the customer (e.g., technical, commercial, product and manufacturing process-related requirements, general terms and conditions, customer-specific requirements, etc.)

Customer-Specific Requirements: Interpretations of or supplemental requirements linked to a specific clause(s) of IATF 16949 or this requirements document. Examples may include:

- Manufacturing feasibility
- Warranty management
- Development of products with embedded software
- Temporary change of process controls
- Supplier quality management system development
- Second-party audits • Control plan

- Problem-solving methodologies
- Control of changes
- Total productive maintenance
- Standardized work

Design Responsible Supplier – supplier with authority to establish a new, or change an existing, part specification. Note: this responsibility includes testing and verification of design performance within the customer's specified application.

Extraordinary Quality Initiative (EQI) – Strategy / Plan to implement a safe launch process, above and beyond normal control plan activities.

Failure Mode and Effects Analysis (FMEA) – a systematic group of activities intended to: a) recognize and evaluate the potential failure of a part/process and the effects of that failure, b) identify actions that could eliminate or reduce the chance of the potential failure occurring, and c) document the entire process.

Measure System Analysis (MSA) – determines the variation of the measurement system in proportion to the variation of the process and/or the allowable tolerance.

MRD – Material Requirements Date. Date suppliers must meet for plant requirements.

Enovation Controls - Product Development Potential Build Events

DV - Design Verification Build X1…Xn

Certification (Certification Build) – provides product for certification, final validation, marketing/show, reliability growth and field test. Validate manufacturing processes and exercise production material systems. Total manufacturing production-intent processes.

Q (Quality Build) – verifies components and assembly processes meet product requirements and intended performance when run at reduced, controlled capacity volumes. Ensure complete manufacturing and supply base readiness to meet normal production expectations of quality.

PV (Production Validation Build) – verifies components and assembly processes meet product requirements and intended performance when run at reduced, controlled capacity volumes. Ensure complete manufacturing and supply base readiness to meet normal production expectations of quality.

VC (Volume Complexity Build) – verifies components and assembly processes meet product requirements and intended performance when run at planned capacity volumes.

Job 1 – implements a controlled production start, producing engines and vehicles for final customers.

Enovation Controls Supplier Quality Representative – The Enovation Controls Supplier Quality Representative who works with the supplier to ensure quality requirements are understood and verifies the supplier has met PPAP requirements by signing the Part Submission Warrant (PSW).

Enovation Controls Supplier Assessment (SQS) – a supplier assessment form focused on part and process development, sub-supplier management, manufacturing, and customer satisfaction. Form is located at www.Enovation Controlssupplier.com website.

Part Submission Warrant (PSW) – a PPAP approval document used to confirm supplier parts conform to customer requirements. (PPAP)

Pass-through Characteristic (PTC) – characteristics manufactured within the supplier process and used in (Enovation Controls or Enovation Controls customer's) process without modification or further validation.

Point of Application (POA) – point where the part is used in the manufacturing process.

Production – any part sourced for use at Enovation Controls facilities intended for use on saleable engines or vehicles built at Enovation Controls sites, plants or facilities and having completed documentation for approval per the Enovation Controls PPAP process.

Production Part Approval Process (PPAP) – a collection of documents providing evidence to Enovation Controls that all requirements have been met.

Production Validation Testing (DVP&R) – test plan that validates the parts made from production tooling and processes meet customer engineering standards including functional, durability, reliability life, environmental and appearance.

Prototype Part – A part produced on a non-manufacturing process, such as but not limited to, a tool shop, laboratory, or other non-manufacturing or serial production process. For business reasons, Enovation Controls may choose to build with a Prototype part, but it cannot remain on saleable engines and vehicles, and requires retrofit with a production level part prior to engine or vehicle release to the customer.

Quality Planning – a structured process for defining the methods (e.g., measurements, tests) that are used in the production of a specific part or family of products (e.g., parts, materials). Quality planning embodies the concepts of defect prevention and continual improvement as contrasted with defect detection. (APQP)

Special Characteristic – part and process characteristics designated by the customer or supplier, including governmental regulatory and safety, and/or selected by (Enovation Controls) through knowledge of the part and process.

Stable Processes – processes that are in statistical control.

Statistical Control – the condition of a process from which all special causes of variation have been eliminated and only common causes remain.

Stream – a term used for a production process that is referenced in the PPAP table. One stream of a multiple stream process indicates that part will have more than one production process. (e.g., the process calls for 3 CNC lathes in parallel, meaning 3 streams.)

Supplier – any contracted individual, group or company having a contract with Enovation Controls to supply parts, services, sub-assemblies or assemblies to Enovation Controls plants, sites and facilities or to support Enovation Controls dealers and customers for the purpose of building (engines or) vehicles.

Supplier Request for Engineering Approval (SREA) – Used when a Supplier requests a change to an already approved production part or process.

3 legged 5 Why – A problem solving technique used to create a detailed explanation of where, when, and how a problem occurred, by evaluating three separate areas which could have contributed to the problem.