

1. CONTENTS

1.	Contents	1
2.	Introduction.....	1
3.	Applicable Documents.....	2
4.	Quality System Requirements	2
5.	Supplier Approvals	2
6.	General Requirements	3
7.	Product Qualification.....	4
8.	Process Control.....	6
9.	Change Control.....	9
10.	Control of Nonconforming Product.....	10
11.	Packaging, labeling, delivery & record retention	10
12.	Continual Improvement	12
13.	Supplier Performance.....	13
14.	Indemnification	13
15.	Equal Opportunity	14
16.	Labor Disputes & Work Disruptions	14
17.	Payments to Influence.....	14
18.	Revision History.....	16

2. INTRODUCTION

The purpose of these Supplier Quality Requirements is to define the minimum requirements, processes, and systems for doing business with Dow Hydraulic Systems (Dow). It is the responsibility of all suppliers including distributors and the Supplier’s sub-tier/sub-contract suppliers to review, understand and ensure compliance with this document as a condition of doing business with Dow.

In this document, the terms “shall” and “must” mean that the described requirement is mandatory, while the term “should” means that the described requirement is needed and expected with some flexibility in how it is implemented.

These requirements are inseparable from the Dow Purchase Order (P.O.). If any provision of this document is determined to be invalid or unenforceable, that determination shall not affect the validity of the remaining provisions.

By acceptance of this contract, the supplier agrees that the Purchase Order, including these requirements, constitutes the entirety of the agreement between Dow and the supplier. Any prior written or oral agreements are considered to be superseded. Any additions, deletions, or differences in the Supplier Quality Requirements of this contract proposed by either party must be agreed upon in writing by the other party.

The work performed by suppliers is critical to product and service conformity, and to product safety. Suppliers are expected to adhere to strict professional and ethical standards in their dealings with Dow Hydraulic Systems. Suppliers are required to ensure that their persons are aware of:

- their contribution to product or service conformity;
- their contribution to product safety;
- the importance of ethical behavior.

3. APPLICABLE DOCUMENTS

- ANSI/ASQ Z1.4
- ANSI/NCSL Z540.1
- AS5553
- AS6174
- AS9003
- AS/EN/JISQ9100
- AS/EN/SJAC9103
- AS/EN/SJAC9120
- Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010
- Dow Purchase Order (QF24)
- ISO 9001
- ISO 10012
- ISO 17025
- MIL-STD-105
- PRI/NADCAP AC7004

4. QUALITY SYSTEM REQUIREMENTS

Suppliers shall maintain a Quality Management System (QMS) suitable to the products and services provided to Dow. They must be compliant to the latest version of the QMS that is applicable to them, or as otherwise stated in the Purchase Order. Compliance will be based on a third-party certification, a Dow audit, or a self-assessment to the applicable criteria as defined below:

- Distributors shall comply with AS/EN/SJAC9120.
- Raw Material and Commercial Off-The-Shelf Suppliers (COTS) shall comply with ISO 9001, or equivalent.
- Special Process Suppliers shall comply with AS/prEN/JISQ9100, or accredited to PRI/Nadcap AC7004, as applicable.
- Parts Suppliers manufacturing complete parts per print shall comply with AS/prEN/JISQ 9100.
- Service Suppliers performing manufacturing processes shall comply with AS/prEN/JISQ 9100, AS9003, or PRI/Nadcap AC7004, as applicable.

Suppliers shall conduct periodic internal audits to assess both conformance to the QMS and conformance to the specifications required by Dow purchase orders. This requirement shall also apply to subtier suppliers.

The supplier shall furnish Dow with a copy of the Supplier's Quality Management System Manual upon request. The supplier shall notify Dow of any change in certification status.

5. SUPPLIER APPROVALS

When the P.O. states that suppliers must have customer or Nadcap approval, it is the supplier's responsibility to notify Dow if such approval is not held, or has been withdrawn, by the specified customer or by Nadcap.

6. GENERAL REQUIREMENTS

6.1 Compliance to Contractual Requirements

Upon accepting a contract from Dow, the Supplier is responsible for compliance to all contract requirements. All documents, drawings and specifications are applicable to the Supplier when specified in the contract or documents referenced in the contract. Unless otherwise specified in the contract, the document revision in effect on the date of issue of the contract applies to the contract. The Supplier's full or partial performance of work as specified on the contract shall be considered Supplier's acceptance of all requirements of said contract.

The various documents constituting this purchase order shall be interpreted as to be consistent with one another. In the event that an inconsistency or ambiguity is identified the following order precedence shall apply, with the first listed item having a higher precedence than a later listed item;

- a) government contracts, ITAR (as applicable)
- b) provisions set forth on this purchase order
- c) drawings
- d) specifications

Acceptance of parts by Dow by way of inspection or tests does not relieve the Supplier of the responsibility to furnish acceptable products or services that conform to all contract requirements; nor does it preclude subsequent rejection by Dow or its customers.

6.2 Control and Release of Furnished Documents

Documents furnished by Dow to the Supplier are furnished solely for the purpose of doing business with Dow. All technical data provided is considered proprietary by either Dow or Dow's customers. The Supplier is responsible for controlling and maintaining such documents to preclude improper use, loss, damage, alteration and/or deterioration.

Unless otherwise specified in writing, all technical documents provided must be returned to Dow at the completion of this order. The Supplier shall not transmit or furnish any furnished documents, or copies of such documents, to anyone outside the Supplier's business organization except to a sub-tier source used by the Supplier for performance of work on this contract. The Supplier shall flow down this requirement to its sub-tier sources.

6.3 Business Requirements

All documentation must be communicated to Dow in English unless otherwise specified.

6.4 Right of Access

The Supplier agrees at all practical times to be subject for review and have right of access by Dow, its customer and regulatory authorities to all facilities involved in this order and to all applicable records, subject to proprietary considerations.

6.5 Business Continuity

Any significant changes in business climate such as acquisitions, divestitures, pending litigation, or any activity that may change the financial viability of the Supplier's organization must be communicated to Dow.

The Supplier should have a business continuity plan that will facilitate quick response, reaction and resumption of parts and services in the event of disruptions, such as significant utility interruptions, labor shortages, equipment failure and field returns.

6.6 Dow Supplied Items

All material and tooling furnished to Supplier in order to fulfill production activities required by contract is property of Dow and must be controlled and labeled as such. Supplier must store and use such items in a manner that will protect items from excess wear, damage, theft, or loss. Supplier shall also not substitute or modify these items without prior approval from Dow. Furnished items shall be used only for the purposes of the Dow purchase order. The Supplier shall not dispose of furnished item(s) without prior written approval from Dow. Upon completion of the order, or upon Dow's request, the Supplier shall return, or otherwise dispose (if authorized by Dow), the furnished item(s).

7. PRODUCT QUALIFICATION

7.1 Inspection Records

All design and specification requirements must be properly understood by the Supplier. The Supplier must be capable of consistently meeting the requirements. A First Article Inspection Report (FAIR) per Aerospace Standard SAE AS9102 latest revision (including a bubbled blueprint), a Final Inspection Report (FIR), or both may be required by contract in order to show evidence that requirements were met. Copies of all referenced material and processing certifications must be included with the inspection records at the time of shipment.

The supplier shall maintain quality records in sufficient detail to establish evidence that required tests and verifications were properly performed, and that only product meeting specified requirements have been accepted for delivery to Dow. A copy of these quality records and the Supplier's statistical process control plan shall be furnished to Dow upon request.

7.2 Sampling Inspection and Approval

The Supplier is responsible to ensure that all items delivered to Dow meet all requirements. Unless 100% inspection is specified, any Final Inspection Report (FIR) provided shall utilize statistically valid inspection techniques. The FIR shall list each characteristic from the blueprint, including notes and general "block" tolerances. It shall also list any special requirements given by the Purchase Order or by documents referenced by the Purchase Order. For each item listed, the Supplier shall record:

- the dimensional range of the parts inspected, or
- the certification number for certificated materials & processes.

General statements of conformance such as 'Conforms', 'Verified', 'Accept' etc. may only be used where a numerical dimensional range or certification number cannot be applied.

When no inspection sampling criteria is specified by the P.O., documents referenced therein, or these Supplier Quality Requirements, the default inspection sampling criteria shall be per ANSI/ASQ Z1.4 (MIL-STD-105), Level II 0.65 AQL, c = 0. Use the table below to select the correct sample size for the production lot or batch:

Lot or Batch Size			Inspection Sample
2	to	8	100%
9	to	15	100%
16	to	25	20
26	to	50	20
51	to	90	20
91	to	150	20
151	to	280	32
281	to	500	50
501	to	1200	80
1201	&	Over	*

* Request an inspection plan from Dow Hydraulic System's Quality Department for lot or batch sizes of more than 1200 units.

100% inspect the first part and last part from the lot. Select the remaining parts for the inspection sample randomly from the remainder of the lot. Samples from each container within the lot or batch shall be proportionate to the fraction of the lot or batch that they represent. Identical Characteristics appearing on the same part & uniformly manufactured by mechanical means may be combined for purposes of computing lot & sample sizes.

The measurement precision for each recorded measurement shall be appropriate to the tolerance range. For total dimensional tolerance ranges of .0005 or less, 5 digit measurement precision (.XXXXX) or better must be recorded. For total dimensional tolerance ranges of >.0005- ≤.005, 4 digit measurement precision (.XXXX) or better must be recorded. For total dimensional tolerance ranges of >.005, 3 digit measurement precision (.XXX) or better must be recorded.

7.3 Special Characteristics

The Supplier shall demonstrate conformity to those special and key characteristics (KC's) designated by Dow, or Dow's customers, through means of documentation and appropriate control methods. In addition to any special characteristics identified by Dow, or Dow's customers, the Supplier shall also review, identify, document, and control other product and process characteristics that are key to achieving quality.

Unless otherwise specified, the following characteristics require 100% lot inspection for that characteristic:

- all "Key", "Critical", "Safety", & "Safety Critical" characteristics
- threads
- spring rates
- splines
- non-destructive test requirements (e.g. heat treat hardness testing, magnetic particle, penetrant, ultrasonic)
- any characteristic found with a defect or discrepancy from the requirements

If the Supplier wishes, the Supplier may request authorization from the Quality Department at Dow Hydraulic Systems to control specific characteristics per the requirements of AS/EN/SJAC9103. If granted, the Purchase Order shall be revised to reflect the specific authorization granted.

8. PROCESS CONTROL

8.1 Control of Sub-Tier Suppliers

The Supplier is responsible for meeting all requirements, including work performed by the Supplier's sub-tier Suppliers. When the Supplier uses sub-tier sources to perform work on products for Dow, the Supplier shall flow down requirements to its sub-tier sources including all of the applicable technical and quality requirements contained in the Dow contract, and to furnish certifications and test reports as required.

When required by contract, the Supplier shall only use special process sources that are approved by Dow's customers as listed on the applicable customer's approved process suppliers list. This requirement applies to Suppliers who perform special processing such as heat treating, plating, etc., as part of their internal operations. The Supplier shall flow-down this requirement to its sub-tier sources.

8.2 Control of Monitoring and Measuring Devices

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

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

Unless otherwise specified by contract, the Supplier shall establish procedures to control Measuring and Test Equipment (M&TE) that are in compliance with the requirements of ANSI/NCSL Z540.3 or ISO 10012, except calibration laboratories shall comply with ANSI/NCSL Z540.1, ISO 17025, or equivalent.

8.3 Shelf-Life Control

Materials - With each delivery of materials or products that have a limited or specified shelf life, the Supplier shall furnish data that shows (a) the cure or manufacture date, (b) expiration date or shelf life, (c) lot or batch number, and when applicable any special handling or storage requirements. Unless otherwise specified by contract, for all shelf life limited materials or products delivered to Dow, the remaining shelf life shall be a minimum of 80% of the total shelf life for the material.

8.4 Prohibited Processes

Aluminum oxide blasting may never be used unless otherwise stated in this PO.

8.5 Part Preservation and Protection

It is the Supplier's responsibility to keep product shipped to Supplier's facility preserved and protected from all damage due to corrosion, physical damage (dinged edges, scratches, etc.), foreign objects or anything else that may have a deleterious effect on the parts. Parts shipped by the Supplier shall be similarly protected.

Some alloys used by Dow Hydraulic Systems are highly susceptible to corrosion (52100, Nitralloy 135, etc.). Such parts shall not be allowed to sit dry over extended periods of time.

8.6 Counterfeit Prevention

Suppliers of parts and materials shall establish and maintain a Counterfeit Parts Prevention & Control plan using industry standards AS5553 & AS6174, as applicable.

The Supplier shall notify Dow of any parts acquired through the use of 3rd party distributors or any other non-OEM (Original Equipment Manufacturer) sources and shall obtain authorization from Dow prior to shipment. The supplier shall provide full traceability to the OEM and complete documentation for supplied products, including the original manufacturer name, original manufacturer part number, serial/lot number, and shelf life (if applicable). The supplier shall comply with all applicable OEM requirements for the distribution and sale of products and shall certify that products were purchased directly from the OEM or an authorized distributor.

All eligible suppliers shall participate in the Government-Industry Data Exchange Program (GIDEP) and shall utilize that process to alert other GIDEP participants of any encountered counterfeit parts.

8.7 Restrictions on Conflict Minerals

Product purchased under this order shall be free of Conflict Minerals as described by Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (containing any amount of Tantalum, Tin, Tungsten, or Gold originating from the Democratic Republic of Congo or adjoining countries). The Supplier shall report to Dow any conflict mineral supplied to Dow which does not come from conflict-free smelters.

8.8 Lot Traceability

Suppliers shall establish a lot traceability system that tracks components through all processing, from raw material through shipment to Dow. This includes all process steps including inspection and test procedures, rework and sub-tier supplier operations. If multiple lots, either of the same part number or of similar part numbers, are processed concurrently then lot integrity shall be maintained and lots shall not be mixed.

In those cases where the Supplier elects to use more than one lot of raw material, the Supplier shall ensure, document and furnish positive traceability of each individual product to the raw material certification/test report that represents the raw material from which each of the products was manufactured. Traceability shall be provided by identifying the raw material heat, lot, batch or melt number from the certification/test report on the product and/or on packaging (when used), or the products segregated and identified.

8.9 Heat Treatment & Part Hardening

Suppliers performing heat treatment & part hardening operations shall apply controls for heat treating finished machined surfaces (including atmosphere controls, pre-cleaning, etc.), except when heat treating bar stock or when specifically authorized by the Purchase Order.

Suppliers performing heat treatment & part hardening operations shall not blast parts to remove post heat treat scale unless authorized by the Dow Purchase Order. Dow Hydraulic Systems shall normally clean and remove any post heat treat scale which remains on parts after the parts are received from the supplier.

8.10 Hardness Testing

Suppliers performing heat treatment shall perform applicable hardness testing at the location specified by the Purchase Order. When a hardness test location is not specified, the supplier shall select a location which shall not be detrimental to part function. Hardness testing on diameters or surfaces held by the blueprint to ± 0.002 or tighter, or to be finished at next assembly, is prohibited without specific authorization from Dow. Remove raised material from the hardness test location. Straightness requirements, if specified, must be held after hardness testing is complete.

8.11 Non-Destructive Testing

Suppliers performing non-destructive testing shall affix their acceptance marking / stamp to the certification of conformance (CofC) in addition any other part marking required by the specification. To prevent physical markings from being obliterated by future handling / processing, the supplier shall apply any physical part markings required by the specification to either end face of the part or to a recessed outer diameter. The feature selected to receive the marking must not be subject to any tolerances of less or equal to ± 0.001 inches.

8.12 Calibration

Unless otherwise specified, calibration services performed in connection with this Purchase Order shall be performed to meet the original equipment manufacturer's stated accuracy, precision, etc.

8.13 Inspector Vision

Procedures shall be implemented to ensure that eye examination, including visual acuity and color vision, as applicable, are administered by a medically qualified / trained person to all individuals performing M&TE services that require visual acuity.

- Intervals shall not exceed one year.
- Individuals shall be tested in at least one eye, either corrected or uncorrected.
- Color perception testing is required one time only, but may be performed annually. Individuals shall be capable of adequately distinguishing and differentiating colors used in the method for which certification is required, the process being performed or inspection activity.
 - A minimum of 4 on the Ortho-Rater,
 - 10 correct on the Pseudisochromatic,
 - at least one of two for red/green (severe) and one of two for blue/violet (mild) Ishihara plates on the VS-II Vision Screener (same as Sight Screener II),
 - or an equivalent test.
- Records shall be retained for each individual.

The minimum vision requirement for testing of individuals performing inspection services is:

- Jaeger 2 or better at not less than 12 inches, or
- Snellen score 14/18 (20/25) or better

Depth perception required.

Note: Vision tests may be substituted for the options listed providing the equivalence is verified and documented by a licensed optometrist or ophthalmologist.

8.14 Acceptance Authority Media

Suppliers shall comply with the AS/EN/JISQ 9100 requirements and 14CFR Part 21.2 regarding the application of the Acceptance Authority Media (AAM) requirements. Suppliers shall, within their organization and their supply chains, ensure that the use of AAM is clearly defined within its Quality Management System (QMS). Suppliers shall, upon customer request, be able to demonstrate evidence of communication to its employees and to its supply chain; use of AAM must be considered as a personal warranty of compliance and conformity. Suppliers shall maintain compliance to the AAM requirements by assessing its process and supply chain as part of its internal audit activities. The areas of focus of this assessment shall include but not limited to:

- Authority Media Application Errors (i.e. Omission, Typos, Legibility, etc.)
- Authority Media Application Untimely Use (i.e. Documentation is not completed as planned, “Stamp/Sign as you go”, etc.)
- Authority Media Application Misrepresentation (i.e., uncertified personnel, Falsification of documentation, Work not performed as planned, etc.)
- Authority Media Application Training Deficiencies (i.e. Ethics, Culture awareness, Proper Use of authority media, etc.).

9. CHANGE CONTROL

9.1 Change Control Process

The Supplier’s quality system must ensure that the latest engineering drawings and specifications are available and used at the manufacturing, test and inspection location. Changes to requirements will only be expressed by Dow to the Supplier by changing the purchase order.

Unless otherwise specified by Dow, the Supplier must certify to the latest revision, amendments, types, classes, and PSD’s of specifications on the purchase order. Superseding specifications may not be used without authorization. Supplier must certify to specifications as shown on the purchase order. If Purchase Order authorizes superseding specifications then Supplier may use superseding specifications, certified in accordance with the following format: “[superseding spec] supersedes [original spec] per [authoritative document]”.

Supplier must notify Dow Hydraulic Systems of changes in product and / or processes, and where required, obtain Dow’s approval.

9.2 Supplier Change Requests

If a requirement of the Purchase Order or any part of a specification or other requirement cannot be performed, then Dow must be notified, and the P.O. must be amended in advance of processing. The exclusion or change to the requirement must be specifically noted on the Supplier’s certification. Standard notes or blanket statements of exclusion on the certification are not acceptable methods of notification.

10. CONTROL OF NONCONFORMING PRODUCT

For nonconforming products supplied to Dow, the Supplier may be held responsible for all costs to correct the nonconformance, including the costs of sorting, elevated inspection, rework, shipping, scrap, expedite charges and reimbursement of charges from Dow's Customer. Nonconforming product returned to the Supplier shall be shipped at Supplier's expense and risk of loss. If good parts are subsequently returned to Dow, they shall be accompanied by notice stating whether they are new replacements or reworked parts.

10.1 Supplier Request for Nonconformance Deviation

A Supplier shall not knowingly ship product that deviates from the drawing, specification limits, or design intent without prior written authorization from Dow. If such a condition exists, the Supplier shall document all nonconforming conditions and submit them to the Dow Buyer (Purchasing Agent) for review. Dow may reject all or a portion of the nonconforming parts. The Supplier may be held responsible for costs incurred in obtaining customer acceptance of the deviation.

If requested by Dow, the Supplier shall send nonconforming items to Dow or a Dow approved source (e.g. metallurgical lab) for evaluation. The cost of shipping, inspection, and testing to determine the potential acceptability of such product may be charged to the Supplier. Authorization to ship nonconforming product must be communicated to the Supplier in writing and final acceptance is conditional on Dow's evaluation.

Dow approval of a deviation is specific to the products for which it has been submitted and approved and shall not to be construed as a permanent engineering change. Any parts shipped to Dow that have been approved for deviation shall be clearly identified as such on the packaging and on shipping documentation and be packaged separately from conforming parts so that the non-conforming product is easily identifiable. Inside of each box shall contain a copy of the deviation approval document sent by Dow.

10.2 Supplier Corrective Action & Containment

The Supplier shall begin work immediately to put appropriate corrective actions in place to prevent future deviations. In all cases, the Supplier shall identify and fully contain all product suspected of being nonconforming. Until formal corrective action has been taken and approved, the Supplier shall provide documented evidence with subsequent shipments to Dow that such product has been inspected for the identified nonconformance and meets all applicable requirements.

10.3 Notification of Escape

Suppliers are required to notify the Dow Buyer within one business day of discovering any nonconformance that could potentially affect parts that have previously been shipped to Dow. The Supplier shall determine the full extent of the nonconformance and immediately begin the processes of containment and corrective action.

11. PACKAGING, LABELING, DELIVERY & RECORD RETENTION

Preservation, packaging, labeling, and shipping methods must comply with common industry practices and requirements specified on the contract.

11.1 Packaging

The Supplier must adequately package product, designed to prevent product contamination, deterioration or loss and to eliminate shipping damage. The method of packaging supplied by Dow must be assessed for re-use, and when practicable, used for return shipment. Suppliers should provide expendable packaging or returnable containers, where appropriate, that provide for sufficient density and protection from any likely damage that may occur.

11.2 Labeling

Packages delivered to Dow must be labeled clearly identifying the contents of the package.

11.3 Delivery

Delivery shall be no earlier than 5 business days (1 week) prior than the due date and no later than the due date without authorization. Earlier delivery, however, is often permissible and desired. Please contact the Dow buyer if early delivery is possible so that the Purchase Order can be revised accordingly.

The Supplier shall immediately notify Dow of any delay, or potential for delay, in delivering product and provide a new delivery date. The Supplier shall take necessary actions to mitigate the potential impact of any such delay. The Supplier may be responsible for additional expedited transport costs due to delays.

11.4 Certificates of Conformance (C of C)

A signed C of C by the qualified representative of the Supplier attesting that all products and/or services delivered are in compliance with all contract requirements shall be furnished with each shipment to Dow. All signatures must clearly show title of the signatory. The C of C shall include, (at a minimum):

- a. Supplier Name
- b. part number
- c. drawing revision
- d. Dow P.O. number
- e. line/release number (when applicable)
- f. quantity of acceptable parts delivered
- g. any approved deviations included in the shipment (when applicable)
- h. the revision of any 'frozen' planning (when applicable)
- i. packing list/shipper number (when applicable)

Additional certifications/test reports certifying compliance to the required specifications and revisions shall be provided when special processing and calibration services are specified on the contract. In such cases, the certifications must reference all Types, Grades, Classes, Boeing Product Specification Departures (PSD's), etc. which are applicable to subject specifications. Measurements stated on certifications and test reports shall be recorded in the same unit scales defined by the Purchase Order and associated requirements. The special process certification must include Supplier's NADCAP certification number and expiration date when required.

Raw metallic materials (including forgings and castings) supplied shall include a copy of the original mill certificate or material test report (certification) from an accredited test lab. Raw material mill certifications may not be altered or have any markings other than check marks from verification of physical and chemical values and/or indication of inspection acceptance. Stamps may be applied by warehouses/distributors to add incidental information such as the purchase order number, weight shipped, etc. When required by contract,

certification shall show that all materials comply with all Government requirements including country of origin and country where the material is melted. The certification must be signed and dated with heat lot and specification used.

For processes involving thermal operations (e.g. heat treatment, cold stabilization, or stress relief), the certification must record both the processing temperatures and the times at those temperatures.

11.5 Record Retention

Suppliers, including sub-tier suppliers, are required to retain quality records on file for at least thirty years, unless contractually required, or as specified in other regulations or legislation. Quality records shall include: route cards/routers/travelers, machine maintenance records, non-conformance reports, calibration records, inspection records, test results, material & processing certifications, & all other data pertaining to product processing or product realization. Dow must be notified in writing prior to dispositioning records & must be allowed the opportunity to claim possession of records, including records from sub-tier sources. Records must be legible, protected against deterioration and loss, and be easily retrievable for review by Dow Hydraulic Systems, its customers or regulatory authorities.

Electronic data retention is permissible, provided a secure recovery / backup system is in place to prevent data loss. Electronic data stored outside of the supplier's facilities must be encrypted prior to storage.

Record retention requirements shall be flowed down to sub-tier suppliers, as applicable.

12. CONTINUAL IMPROVEMENT

12.1 Corrective Action Report

Dow may issue a request for a Corrective Action Report (CAR) to the Supplier when nonconforming material or products are found. The supplier shall respond with a root cause, corrective action, and proposed verification plan by the due date indicated. When documenting the root cause, the Supplier shall include the underlying reasons:

- a) why the specific nonconforming condition or incident occurred,
- b) why it was not detected by the Suppliers quality controls.

The Supplier should apply the following criteria to determine whether the underlying root cause has been identified:

1. It initiates and causes the event you are seeking to explain.
2. It is directly controllable.
3. The elimination of that root cause will result in the elimination or reduction of the problem.

Statements from the Supplier indicating that the corrective action is to alert or retrain the operator, and/or increase inspection, alone, are NOT acceptable corrective actions. These kinds of actions would be considered insufficient and not address the real underlying root cause(s) of why the Supplier's policy, instructions, process, procedure, and/or system allowed the problem to develop and occur and not be detected by quality controls.

13. SUPPLIER PERFORMANCE

Dow evaluates supplier performance using the factors of Quality and Delivery in order to establish an overall Supplier performance rating. This rating serves as an objective measure to determine supplier risk and whether Dow's expectations are being met. If the Supplier's rating falls below the required threshold, a Supplier documented corrective action and improvement plan will be required to reduce associated risks and improve the process.

13.1 Performance Measures

Supplier Quality Rating – percentage of parts received as acceptable

Supplier Delivery Rating – percentage of jobs received on time

Supplier Documentation Rating – percentage of jobs received with correct documentation

Overall Rating = $0.4(\text{Quality Rating}) + 0.4(\text{Delivery Rating}) + 0.2(\text{Documentation Rating})$

The current overall rating objective is 95%.

Suppliers with overdue or unsatisfactory responses to corrective action requests may be placed on conditional/limited approval statuses or disapproved, at the discretion of Dow's Quality Department.

Unless otherwise directed by Dow's Quality Manager, the Supplier's status shall be determined by the number of quarters in the past twelve months where the supplier has fallen below the overall rating objective established by Dow Hydraulic Systems.

- Approved: The Supplier has met the overall rating objective for all quarters in the evaluation period.
- Warning: The Supplier has fallen below the rating objective for one (1) quarter in the evaluation period. The supplier shall be notified & warned that improvement is needed.
- Probation: The Supplier has fallen below the rating objective for two (2) quarters in the evaluation period. Dow purchasing agents shall be directed to prefer alternate sources of supply whenever possible until a robust Corrective Action has been accepted by Dow and verified as effective.
- Conditional Approval: The Supplier has fallen below the rating objective for three (3) quarters or more in the evaluation period. Dow purchasing agents shall be prohibited from using the Supplier, except when explicit authorization for the purchase order is given by Dow management.

In addition, Dow Hydraulic Systems shall assign a letter grade based on the supplier's performance relative to the overall rating objective during the last quarter. The letter grade shall be used to communicate both the Supplier's current status and the associated Supplier risk to Dow's receiving inspection personnel.

- 'A' rating: Suppliers who met or exceeded the overall rating objective.
- 'B' rating: Suppliers who fell short of the overall rating objective by 5% or less.
- 'C' rating: Suppliers who fell short of the overall rating objective by more than 5%.

14. INDEMNIFICATION

Supplier shall indemnify and save harmless Dow, Dow's insurers and Dow's Affiliates and their employees, agents, officers and directors for and from all suits, claims, judgments, awards, losses, damages, costs or

expenses (including attorneys' fees) relating to, arising out of, or caused by the performance hereunder, any act or omission of Supplier or any Goods or Services. Supplier's indemnification obligation hereunder covers, without limitation, injuries, sickness, diseases (including occupational disease whenever occurring), or death of Supplier employees.

15. EQUAL OPPORTUNITY

Supplier shall not maintain segregated facilities or discriminate against any employees because of age, race, color, religion, sex or national origin or any other ground prohibited by law. Supplier shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their age, race, color, religion, sex, or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Seller shall post in conspicuous places available to employees and applicants for employment, notices setting forth the provisions of this Equal Opportunity clause. The Supplier shall comply with all provisions of Executive Order 11246, as amended, The Vietnam Veterans Readjustment Act, The Rehabilitation Act of 1973, the Equal Pay Act of 1963, the Age Discrimination in Employment Act, the Americans with Disabilities Act, the Family and Medical Leave Act of 1993, and all other Equal Employment Laws and Executive Orders, and the rules, regulations, and relevant orders of the United States Secretary of Labor, which are incorporated herein by reference. Supplier shall incorporate this Equal Opportunity clause in every non-exempt subcontract issued in connection with this Purchase Order, and Supplier shall obtain identical certifications from subcontractors prior to award of any non-exempt subcontracts.

16. LABOR DISPUTES & WORK DISRUPTIONS

Whenever any event, including an actual or potential labor dispute, is delaying or threatens to delay the timely performance of this order, Supplier shall immediately notify Dow Hydraulic Systems and provide all relevant information. Supplier is required to insert the substance of this clause, including this sentence into any subcontracts.

17. PAYMENTS TO INFLUENCE

Supplier, by accepting the Order or any long-term contract from Buyer or performing against such Order or contract, hereby certifies, to the best of their knowledge and belief, that:

No United States government ("Federal") appropriated funds have been paid or will be paid, by or on behalf of the Supplier to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan or cooperative agreement.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative agreement, Supplier shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying" in accordance with its instructions.

Supplier shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under sub-grants, loans and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S.C.

18. REVISION HISTORY

Revision Level	Revision Date	Comments
NC	8/10/2015	Initial Release
A	4/20/2016	Revised section 8.5, 8.9, & 13.1.
B	01/23/2017	Revised para. 4, 13.1. Added para. 8.11, inserted new para. 15 - 17, para. 18 was 15.
C	02/13/2017	Removed para. 11.3 delivery documentation clause, revised para. 13.1 supplier performance measures, revised para. 18 to add Dow Quality Manager signature line.
D	05/25/2017	Revised para. 7.1, 7.2, 7.3. Added para. 8.12
E	01/24/2018	Revised para. 2, 3, 4, 8.2, 8.6, 8.12, 13, and added para. 8.13
F	03/02/2018	Revised para. 8.6, 13.1
G	11/01/2018	Added para. 8.14
H	12/19/2018	Added to para. 2 for supplier awareness flowdown
J	02/24/2020	Revised para. 2, 6.1, 7.2, 7.3, 8.6, 11.4

Dow Quality Manager Approval:

Date:

2/24/2020

Revision is not valid unless signed. Revisions to this document shall be posted to <http://www.dowhydraulics.com/suppliers/> for distribution to suppliers.