CORRECTIVE ACTION REQUEST

1.0 PURPOSE

To establish a method for prompt documentation and correction of significant conditions adverse to quality.

2.0 APPLICABILITY

This procedure applies to all General Welding and Fabricating, Inc. (GW&F) personnel performing documentation and resolution of significant conditions adverse to quality.

3.0 REFERENCES

- 3.1 GW&F Quality Assurance Manual, Section 9, "Control of Quality Records"
- 3.2 GW&F Quality Assurance Procedure OP 15.0, "Control of Nonconformance"
- 3.3 GW&F Quality Assurance Manual, Section 16, "Corrective Action"

4.0 **DEFINITIONS**

- 4.1 Conditions Adverse to Quality An all-inclusive term used in reference to any of the following: failures, malfunctions, deficiencies, defective items, procedural inadequacies and nonconformance.
- 4.2 Corrective Action Measures taken to rectify conditions adverse to quality and, where necessary, to preclude recurrence.
- 4.3 Significant Condition Adverse to Quality A condition adverse to quality which, if uncorrected, could have a serious effect on safety or operability.

5.0 RESPONSIBILITIES

- 5.1 All GW&F personnel are responsible for identifying any adverse quality condition that might be considered significant.
- 5.2 The Quality Assurance Manager is responsible for assuring that significant conditions adverse to quality are documented and corrected in accordance with this procedure. The QA Manager is responsible for the follow-up, tracking, and timely close-out of Corrective Action Requests (CARs).

6.0 PROCEDURE

- 6.1 General
 - 6.1.1 Conditions adverse to quality are identified through the following:
 - a. Data analysis

- b. Field Inspections
- c. Audits
- d. Procedure reviews
- e. Inspection report reviews
- 6.1.2 Conditions adverse to quality that involve equipment deficiencies are reported on nonconformance reports per OP 15.0, "Control of Nonconformance".
- 6.2 Identification of Deficiencies
 - 6.2.1 Inspection-related deficiencies may include but are not limited to the following:
 - a. Improper performance of required inspections
 - b. Failure to perform required inspections
 - c. Use of uncertified inspectors
 - d. Improper documentation of inspections
 - e. Use of inappropriate or uncalibrated measuring and test equipment
 - 6.2.2 Program related deficiencies may include but are not limited to the following:
 - a. Inadequate or nonexistent program controls
 - b. Incorrect or conflicting procedure requirements
 - c. Failure to follow program procedures
 - 6.2.3 QA/QC personnel are required to identify any adverse conditions to the Quality Assurance Manager or Project Manager.
 - 6.2.4 The Quality Assurance Manager determines when a deficiency is significant through consideration of the following:
 - a. Safety or reliability consequences if the condition had gone undetected
 - b. Scope of the condition
 - c. Recurrence of the condition
 - d. Effect on the maintenance of control

- Note 1: If the condition is determined to be significant, the Quality Assurance Manager appoints an individual to initiate a Corrective Action Request.
- Note 2: If the condition is determined not to be significant, the Quality Assurance Manager shall document the corrective action taken in a letter to the non-significant condition file.
- 6.3 Initiation of the Corrective Action Request
 - 6.3.1 CARs may be initiated by any GW&F personnel in accordance with this procedure.
 - 6.3.2 The initiator completes the top portion of Qform16.0.1, "Corrective Action Request", to the satisfaction of the Quality Assurance Manager including:
 - a. Initiator Name
 - b. Date
 - c. CAR # (obtained from Quality Assurance)
 - d. Description of Significant Condition Adverse to Quality
 - e. Governing Requirements
 - 6.3.2.1 The Quality Assurance Manager will issue the next sequential CAR number utilizing QForm16.0.2, "Corrective Action Request Status Log".
 - 6.3.3 The Quality Assurance Manager shall:
 - a. Initiate changes or additions as deemed necessary.
 - b. Define the proposed implementation/closure date.
 - c. Appoint an evaluator to investigate the CAR.
 - 6.3.4 The Quality Assurance Manager shall review the CAR for accuracy and legibility, then sign the CAR form for concurrence and understanding.
 - 6.3.5 After the QA Manager's signature, changes or additions to the initiation section of the CAR shall not be made unless approved by the QA Manager.
- 6.4 Evaluation of the Condition
 - 6.4.1 The evaluator talks to all involved parties when researching the cause.
 - 6.4.2 The following are considered when determining the root cause of a condition.

- a. Adequacy of the controlling procedure
- b. Adequacy of indoctrination and training program
- c. Feasibility of meeting procedure requirements due to manpower, time restraints, physical restraints, etc.
- d. Adequacy of scheduling and planning
- e. Scope of the deficiency
- 6.4.3 Evaluator will assign a cause code and identify the root cause of the condition.

CAUSE CODES

TRAINING		B10	Wrong drawing revision	PROCEDURAL	
A01	Training not given	B11	Wrong specification revision	C01	Procedure not approve/issued
A02	Inadequate training	B12	Wrong procedure revision	C02	Procedure inadequate
		B13	Drawing misinterpretation	C03	Procedure obsolete
SUPERVISION		B14	Specification	C04	Inadequate documentation
		misinterpretation			
B01	Inadequate instructions	B15	Procedure misinterpretation	C05	Inadequate identification
B02	Inadequate supervision			C06	Traceability not maintained
B03	Lack of planning	<u>INSPECTION</u>		C07	Procedure not followed
B04	Incorrect/inadequate planning	E01	Inadequate		
B05	Insufficient personnel	E02	Not documented	<u>OPERATOR</u>	
B06	Uncertified/unqualified	E03	Not performed	D01	Carelessness
personnel			_		
B07	Wrong drawing	E04	By-passed inspection point	D02	Mishandling
B08	Wrong specification	E05	Product		
B09	Wrong procedure				

6.5 Tracking

- 6.5.1 The Quality Assurance Manager maintains the status of open CARs.
- 6.5.2 Original CARs are maintained in the quality records file, except when being updated.
- 6.5.3 Both CAR's and non-significant letters-to-file shall be tracked and evaluated for trending conditions by the Quality Assurance Manager. This shall be accomplished at least annually.

6.6 Corrective Action Plan

- 6.6.1 Corrective action is not proposed until a thorough investigation is performed to determine the root cause of the deviation.
- 6.6.2 The Quality Assurance Manager institutes any immediate corrective action deemed necessary.
- 6.6.3 Comprehensive corrective action is proposed to address the root cause.

- 6.6.4 Proposed corrective actions are discussed with the appropriate manager to establish the most effective action to be taken. Feasibility, applicability, and an implementation date are considered.
- 6.6.5 The Correction Action Plan is required within 15 calendar days of initiation of the CAR. An implementation date for the proposed corrective action is assigned the earliest achievable date.

6.7 Verification and Close Out

- 6.7.1 The individual responsible for verification ensures that all documentation to support the verification is documented and attached to the CAR.
- 6.7.2 The Quality Assurance Manager or designee shall verify objective evidence that all corrective action required has been implemented, then sign the CAR as complete.

7.0 RECORDS

Records generated due to implementation of this procedure shall be retained in accordance with Section 9, "Control of Quality Records" of the Quality Assurance Manual.

8.0 FORMS

Forms and Logs used as a result of implementing this procedure are QA Records and include:

QForm 16.0.1 Corrective Action Request Form

QForm 16.0.2 Corrective Action Status Log

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