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Subcontractor/Supplier	Program Requirements Document	For Additional Info: http://EDMS	Effective Date: 01/30/17
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Manual: Subcontractor Requirements

Change Number: 352962

*The current revision can be verified on EDMS.

1. PURPOSE

This Program Requirements Document (PRD) provides the minimum requirements for developing, maintaining, completing, and controlling *weld record packages* (see def.) per the Idaho Cleanup Project (ICP) Core subcontract requirements, when performing work activities for ICP Core.

2. APPLICABILITY

This PRD applies to ICP Core *subcontractors/suppliers* (see def.) when specified by a subcontract.

Supplemental requirements may be specified for all or part of the work scope as determined to be appropriate by the *contractor* (see def.). The subcontractor/supplier shall implement the requirements of this PRD and all supplemental requirements, when and as specified by the subcontract, as defined on Form 540.10, “Subcontractor Requirements Manual (SRM) Applicability.”

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3. RESPONSIBILITIES

Performer	Responsibilities
Contractor	Perform weld inspections and record results on the applicable weld record package documents.
Subcontractor/Supplier	<p>Train personnel working to this procedure in accordance with PRD-5001, "Training and Indoctrination."</p> <p>Originate a weld record package for each line, system, or structure prior to initiating any welding activity.</p> <p>Protect and control the use of the weld record package.</p> <p>Update the weld record as work progresses. This information shall be recorded in a timely manner such that the weld records are kept up-to-date. Maintain the weld record log.</p> <p>Prepare a weld map for each structure, system, sub-system, component, assembly, or weldment.</p> <p>Perform weld inspections and record results on the applicable weld record package documents, when required by the subcontract documents.</p> <p>Initiate Form 432.43, "Supplier Weld Map" and 432.44, "Subcontractor/Supplier Weld History Record," or a contractor-approved equivalent for each weld.</p> <p>Comply with all applicable inspection requirements. Either perform inspections or request inspections from the contractor's representative as required by the subcontract.</p> <p>Initiate Form 432.45, "Subcontractor/Supplier Weld Repair Card," for each weld repair.</p> <p>Assemble a weld record package(s) for each system, including all applicable welding, inspection, examination, and testing documentation.</p> <p>Submit documentation required by the vendor data schedule in accordance with PRD-5003, "Vendor Data Control."</p>

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4. REQUIREMENTS

- 4.1 Subcontractor/supplier personnel responsible for the preparation, control, and completion of weld record packages shall be trained to the requirements of this PRD in accordance with PRD-5001.
- 4.2 The supplier shall generate a weld record package, utilizing the latest forms, for each line, system, or structure prior to initiating any welding activity, including bonding HDPE (high-density polyethylene), PVC (polyvinyl chloride), etc., and the weld records associated with those activities.
 - 4.2.1 Weld record packages shall provide objective evidence that the welding activities were performed in accordance with the subcontract.
 - 4.2.1.1 Weld record packages shall be prepared and maintained with black indelible ink. Erasable media, such as pencil, is specifically prohibited.
 - 4.2.1.2 All corrections shall be made by marking a single line through the incorrect entry, then placing the correct entry in close proximity to the incorrect entry.
 - 4.2.1.3 All corrections shall have the initial and date of the individual making the correction in close proximity to the correction.
 - 4.2.1.4 Weld record packages, including weld mapping, shall be clean, neat, free of irrelevant information, and reproducible.
- 4.3 The initial weld record package(s) shall include:
 - A. Form 432.44
 - B. Form 432.43
 - C. Form 432.45, as applicable
 - D. Supplier-provided Weld Procedure Specification (WPS); or, when the INL Weld Manual is specified/utilized, the applicable WPS number.
- 4.4 The subcontractor/supplier shall protect and control the use of the weld record package.
 - 4.4.1 The weld record package shall be protected and controlled in such a manner as to prevent the loss of information and preserve identification and traceability of the documented records of specific activities.

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- 4.4.2 The weld record package shall be used to record welding data required by the subcontract. The data shall be recorded in a timely manner such that the weld record package is kept current.
- 4.4.3 The weld record package shall not be used as a substitute for red-line drawing requirements.
- 4.5 As work progresses, additional documentation shall be incorporated by the subcontractor/supplier as appropriate in the weld record package, including (but not limited to):
- A. Weld repair cards
 - B. Inspection/nondestructive examination (NDE) reports
 - C. Field design changes (FDCs)
 - D. Radiographic results (reader sheets and radiographs).
- 4.6 A weld map shall be generated by the subcontractor/supplier for each structure, system, sub-system, component, assembly, or weldment and incorporated into the applicable weld record package.
- 4.6.1 The weld map shall be maintained on Form 432.43 or a contractor-approved equivalent per PRD-5003. The weld map must provide adequate information to provide traceability between the actual weld and the weld history record.
- 4.6.2 When approved by the contractor, isometric drawings may be used as weld mapping format.
- 4.6.3 The subcontractor/supplier's weld mapping identification shall use the line, system, component, or assembly number specified by the subcontract.
- 4.6.4 The subcontractor/supplier shall generate a unique and separate weld map for each line, system, component, or assembly number.
- 4.6.5 When more than one weld map is required for an individual line, system, component, or assembly, weld map pages shall be numbered sequentially and identify the total number of pages (e.g., 1 of 10, 2 of 10).
- 4.6.6 For piping system, mechanical system, or HVAC (heating, ventilating, and air conditioning) duct, the subcontractor/supplier shall provide a line diagram depicting a simplified facsimile of the system depicted in subcontract documents.

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4.6.7 Line diagrams shall include weld locations, weld numbers, tie point locations, piece numbers, and weld type, including:

- A. *Field weld* (F; see def.)
- B. *Shop weld* (S; see def.)
- C. Tie point (TP; see def.)
- D. Butt joint (B)
- E. Socket joint (S)
- F. Fillet weld (F)
- G. Braze (BR)

Examples: FB = field weld/butt joint; SS = shop weld/socket.

4.6.8 Weld numbers shall be unique (not duplicated) for weld identification on each weld map. Weld numbering methodology shall contain:

- H. A sequential weld number
- I. A repair sequence number when applicable.

4.6.9 Weld mapping of structural components shall include:

- A. Structural weld identification that is traceable to the structural member or component (such as a column number or pipe support)
- B. Weld identification documented on either shop drawings that contain sufficient detail to status individual welds or weld history records that are directly relative to weld locations on subcontract or shop drawings.

4.7 In addition to the required weld mapping, the subcontractor/supplier shall initiate Form 432.44 or a contractor-approved equivalent per PRD-5003 that is identified by using the applicable weld map or weld record package number.

4.8 Subcontractor/supplier personnel performing the welding shall record the following information next to the applicable weld number in the appropriate blocks, as applicable per the subcontract; the following information shall be recorded in a timely manner such that the weld records are kept up-to-date:

- A. Welder identification

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- B. WPS number and revision
 - C. Filler material identification number
 - D. Parent metal heat/traceability number or component identification
 - E. Date the weld was completed.
- 4.9 The subcontractor/supplier shall comply with all applicable inspection requirements as defined by the subcontract.
- 4.9.1 When required by the subcontract, the subcontractor/supplier's representative shall perform and document inspections that are not required to be performed by the contractor's representative. These shall be documented in the weld history package.
 - 4.9.2 Inspection entries shall be made on the same day and same shift the inspection is performed.
 - 4.9.3 Inspections shall not be requested or performed without a current weld record package.
 - 4.9.4 When required by national codes, project specifications and drawings, or other subcontract document, the subcontractor/supplier shall request the following inspections from the contractor's representative who will perform the inspections and document the results on the weld history record:
 - A. Fit-up
 - B. Weld parameters, weld procedure, and qualifications
 - C. Material, filler and base metal
 - D. Weld identification
 - E. Root pass, intermediate, and final NDE per subcontract
 - F. Final NDE and/or VT per subcontract
 - G. Cleanliness.

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- 4.10 The subcontractor/supplier shall initiate Form 432.45 or a contractor-approved equivalent per PRD-5003, for any weld or base metal repair where grinding has reduced the thickness below the minimum allowable for a completed weld joint.
- 4.10.1 A weld repair card shall be initiated prior to the deposit of any additional filler metal.
- NOTE:** *A weld repair card is not required for in-process weld defects (see def.).*
- 4.11 The subcontractor/supplier shall issue a weld repair card for any weld defects identified and documented by the contractor's representative as a result of a required inspection or examination.
- 4.12 A Subcontractor/supplier-issued weld repair card shall be initiated and maintained in accordance with the same requirements as the other weld history records.
- 4.13 All completed and applicable radiograph reader sheets shall be incorporated into the weld record package by the subcontractor/supplier. Original radiographs shall be turned over to the contractor for retention as a record.
- 4.13.1 The original radiograph reader sheets shall be maintained with the applicable radiographic film and a copy maintained with the weld record package.
- 4.13.2 Radiograph reader sheets that include welds from related weld record packages may be duplicated, provided the location of the original is referenced. For example:
- “The original test record is filed with weld record package number 001996.”
- 4.14 Documentation required by this PRD shall be completed, maintained, and stored in a single location in a secure and protected environment during the full performance of the work.
- 4.14.1 All required documentation shall be legible, reproducible, free from erasure, correction fluid, and/or correction tape, and completed in black indelible ink only.
- 4.14.2 When a correction to documentation is required, a single line shall be drawn through the information to be deleted; additional information, if needed, shall be recorded adjacent to the information being changed; and the individual revising the document shall initial and date each entry adjacent to the correction.

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- 4.14.3 When completed, all blanks or blocks shall be filled in on each document. If there is no relevant information, the blank or block shall be marked “N/A.”
- 4.14.4 All required documentation, shall be made readily available for contractor review and/or audit.
- 4.14.5 All required documentation shall be submitted to the contractor when required by the subcontract in accordance with PRD-5003. If not required to be submitted through the vendor data system, the original packages shall be transmitted to the contractor’s designated representative or inspector for attachment to the inspection plan or the project task-specific work order, as applicable.

5. DEFINITIONS

See LST-27, “Glossary,” for definitions of the terms not provided below:

Contractor

Field weld (F)

In-process weld defect

Shop weld (S)

Subcontractor/supplier

Tie point (TP)

Weld record package: A quality assurance records package that contains the weld history/weld map forms and provides objective evidence of the welding activity, such as welder ID, filler metal, WPS, NDE report, etc.

6. REFERENCES

Form 432.43, “Subcontractor/Supplier Weld Map”

Form 432.44, “Subcontractor/Supplier Weld History Record”

Form 432.45, “Subcontractor/Supplier Weld Repair Card”

Form 540.10, “Subcontractor Requirements Manual (SRM) Applicability”

PRD-5001, “Training and Indoctrination”

PRD-5003, “Vendor Data Control”

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7. APPENDIXES

None