STATEMENT OF WORK

Requisition #: 334079

Title: NDE Services for Effluent Treatment Facility 4% Caustic Tank Replacement

Revision Number: 0
Date: November 26, 2019

1.0 Objective

The Subcontractor will perform radiographic (RT) non-destructive examination (NDE) of field welds for the Effluent Treatment Facility (ETF) 4% Caustic Tank Replacement in accordance with requirements of ASME B31.3.

2.0 Background/Introduction

The ETF is a less than Hazard Category 3 facility that treats and disposes liquid effluents from Hanford programs and projects. ETF removes chemical and low levels of radioactive contaminants from waste feed streams. The 4% Caustic Tank spool pieces are currently being replaced with new spool pieces that will require new pipe and flanges be welded together. These new spool pieces will support installation of a new stainless steel 4% caustic tank, which is being installed to replace the existing Fiberglass Reinforced Plastic tank. The replacement spools will benefit the ETF operations with more reliable valve being installed, which is less prone to leaks, and provide improved ease of maintenance and spare parts availability. The piping and valve piece involves some field welds to be made in the Mission Support Alliance (MSA) welding shop for which examination is required in accordance with applicable codes (ASME B31.3).

3.0 Scope

Task 1
Provide procedures for NDE and for NDE personnel qualification and certification, and documentation of NDE personnel qualification and certification. Reference Section 7.1, Quality Assurance (QA) Clause B31.

Task 2
Perform an RT NDE of WRPS Engineering identified welds on the 4% tank fabricated spool(s). The welds needing RT NDE will be identified after fabrication of the spool piece(s) needing inspection is complete and a visual inspection has been performed. Per ASME B31.3, 5% of welds will need to be inspected, but depending on the number of welders and number of welds, this could be 1-3 spool pieces needing examination. The final selection of welds needing RT will be determined and the welds will be identified to the contractor on “WO #541005 -Attachment 2”. This attachment will be supplemented by the NDE 4% Spool Info attachment (page 4 of 14 from Engineering Change Notice (ECN) 715052 Rev 01) and the Weld Map attachment to this requisition.

Washington River Protection Solutions (WRPS) will deliver the welded piping selected for inspection to the subcontractor’s facility for NDE and pick it up upon completion. Notification will be given at least 48-hours in advance of when NDE is to be performed.

Provide a summary of findings as an inspection report including RT film and weld map as applicable QA Clause B-52.
4.0 Submittals

In support of the work scope established in Section 3.0 above, submittals are listed on the Master Submittal Register (MSR).

Submittals shall be provided using the TOC Incoming Letter of Transmittal form provided by the Procurement Specialist. All transmittal subject headings shall contain, at a minimum, the subcontract number, submittal number, and submittal description.

Submittals shall be provided in electronic format unless available only as a hard copy. Electronic submittals shall be sent in accordance with instructions provided by the Procurement Specialist. Electronic formats must be non-password protected in one of the formats noted on the Procurement Website located and the following web address:

http://www.hanford.gov/tocpmm/files.cfm/APPROVED_ELECTRONIC_RECORD_FOR MATS.pdf

Hardcopy submittals (RT film) shall be sent or delivered to:

WRPS Document Control
2620 Fermi Drive
Richland, WA 99354-1798

5.0 Acceptance Criteria

Subcontract work products and services shall meet applicable standards as referenced in 6.2 below. All deliverable documentation shall be complete, accurate, legible, and reproducible.

Perform examination, develop a report, and weld maps identifying the acceptance or rejection of the welds in accordance with B31.3 acceptance criteria.

6.0 Configuration Management and Standards

6.1 Configuration Management Requirements

There are no specific Configuration Management requirements applicable to this Statement of Work (SOW).

6.2 Applicable Standards

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>ASME B31.3</td>
</tr>
<tr>
<td></td>
<td>Process Piping</td>
</tr>
</tbody>
</table>

7.0 ESH&Q Requirements

7.1 Quality Assurance Requirements

The subcontractor’s program shall be submitted for review/approval against the requirements identified on site form A-6006-661 QA Requirements dated December 3, 2019.

This task is designated as General Service, Quality Level 3 (QL-3). The following QA Clauses apply to this SOW:
- **QA Clause B31 - NONDESTRUCTIVE EXAMINATION PROCESS**

  NDE personnel shall be qualified and certified in accordance with the recommended guidelines of the American Society of Nondestructive Testing's (ASNT) ANSI/ASNT CP-189 or ASNT SNT-TC-1A, unless otherwise specified in the ordering data.

- **QA Clause B52 – INSPECTION AND TEST REPORT**

  The Supplier shall submit legible, reproducible copies of Inspection/Test Reports. The report(s) shall include the following:

  1. Identification of the applicable inspection and/or test procedure utilized.
  2. Resulting data for all characteristics evaluated, as required by the governing inspection/test procedure.
  3. Traceability to the item inspected/tested, (i.e., serial number, part number, lot number, etc.).
  4. Signature of the Supplier's authorized representative or agency, which performed the inspections/tests.

  One copy of the documentation, unless otherwise specified, shall accompany the applicable item(s) shipped.

  The Supplier is not authorized to perform weld examinations until the following documentation has been reviewed and approved by the Buyer:
  - NDE qualification and certification procedures
  - Personnel Level I, II, and III qualifications and certifications which include objective evidence of NDE training, formal education, examinations, experience, date of hire, and current eye examination
  - NDE method/examination procedures that are in accordance with the applicable codes/standards specified in procurement documents.

  All NDE reports and radiographs shall be traceable to the item examined, include all essential examination parameters, and signed and dated by the NDE examiner. Radiographs, and radiographic technique and examination reports shall be subject to approval by the Buyer prior to acceptance of completed items.

7.1.1 **Supplier Quality Assurance Program**

  The Subcontractor's QA Program shall be subject to review at all times, including prior to award.

7.1.2 **Supplier Quality Assurance Program Changes**

  The Subcontractor shall, during the performance of this subcontract, submit proposed changes to their approved quality assurance program to the WRPS Buyer for review and concurrence prior to implementation.

7.1.3 **Quality Assurance Oversight**

  WRPS personnel will coordinate with the supplier to conduct scheduled and periodic oversight of activities or products associated with this scope of work.
7.2 **Price-Anderson Amendments Act Requirements**

This 7.2 section and the General Provisions Article 2.11 entitled, *Price-Anderson Amendments Act (PAAA)*, are both determined to be *not applicable*.

7.3 **Special ESH&Q Requirements**

Hanford Site access is not authorized for work to be completed under this SOW.

8.0 **Verification/Hold Points**

Work products and services provided by this SOW are controlled and reviewed in accordance with paragraph 5.0, Acceptance Criteria.

9.0 **Reserved**

10.0 **Work Location/Potential Access Requirements**

The performance of this SOW will be at the subcontractor’s place of business. Visits to the Hanford site are not anticipated to be required.

11.0 **Training:** N/A

12.0 **Qualifications**

NDE personnel shall be qualified and certified in accordance with requirements of ASME B31.3.

13.0 **Special Requirements**

**Government Property**

Pursuant to the Subcontract Special Provision 12 (SP-12) – Management of Government Property, the following Government-owned property will be furnished to the subcontractor. The subcontractor will be responsible for managing the Government-Furnished Property (GFP) below and/or Contractor-Acquired Property (CAP) as required in the Subcontract Special Provision (SP-12) and in accordance with its Property Management program.

<table>
<thead>
<tr>
<th>Government Furnished Property/Material Description</th>
<th>Quantity</th>
<th>Unit of Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>4% Tank Spools Spool(s) selected by QC after fabrication and identified in an updated WO# 541005 Attachment 2 pages 1-5.</td>
<td>1</td>
<td>LOT</td>
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</tbody>
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14.0 **Reporting/Administration:** N/A

15.0 **Workplace Substance Abuse Program Requirements**

A Workplace Substance Abuse Program is not required for this SOW.