

STATEMENT OF WORK

Requisition # 276223

Title: Revision of WFD Technical Support Documents

Revision Number: 0

Date: February 17th, 2015

Prior SOW or Revision Date: N/A

1.0 Objective

Washington River Protection Solutions, LLC (WRPS) requires a Subcontractor to update the following Waste Feed Delivery (WFD) technical support documents:

- RPP-5227, Rev. 1, “Waste Feed Delivery Raw Water, Potable Water, and Compressed Air Capacity Evaluation.”
- RPP-5228, Rev. 2, “Assessment of the Electrical Power Requirements for Continued Safe Storage and Waste Feed Delivery.”

It is necessary to update these documents to align with current mission priorities, WFD mission needs, and incorporate new developments in preparation for the Direct Feed Low Activity Waste (DFLAW) mission era.

2.0 Background/Introduction

WRPS is in the process of designing WFD systems and equipment to support the DFLAW program. To perform these designs, the upper tier subsystem specifications and technical documents associated with WFD must be updated. Before each subsystem specification can be updated, the requirements associated with the specification must be updated. It is necessary to update these technical documents to provide requirements that will feed into the relevant subsystem specification. For RPP-5227 and RPP-5228, the relevant subsystem specification is HNF-4157, “Double-Shell Tank Utilities Subsystem Specification.”

Additional background information for each technical document is included below:

- RPP-5227, Rev. 1, was issued in 2010. This revision identified and evaluated existing and projected raw water, potable water, and compressed air requirements for all users during WFD System activities for the timeframe of 2010 to 2030.
- RPP-5228, Rev. 2, was issued in 2011 and incorporated changes to SVF-1805, “Electrical Pwr Needs for WFD & SST Retrieval_SVF-1805, R0.XLSX.”

This work will be completed in an office environment. No hands-on field work activities will be performed, but interviews with Hanford personnel will be necessary to collect information for revision of assigned documents. Visits to the Hanford site may be necessary to complete these interviews.

3.0 Scope

The purpose of this task is to update two WFD technical documents:

- Revision is necessary for RPP-5227 to assess the current DST air and water system, and determine deficiencies based on future mission needs. Existing and projected raw water, potable water, and compressed air requirements from all users during all WFD system activities, including but not limited to the Low Activity Waste Pretreatment System (LAWPS), will be identified. It will be necessary to evaluate and document the capability of the existing systems to meet the aforementioned needs and provide an assessment in terms of the quality and flow rate needed to support anticipated activities of all known users for the timeframe of 2015-2035.
- Revision is necessary for RPP-5228 to ensure electrical demand assessments align with WFD and LAWPS mission needs.

The Subcontractor will review each technical document and will identify any information that is out-of-date, incomplete, superseded, or found to be otherwise inaccurate. Through a combination of literature reviews, regulatory and safety basis document reviews, and discussions with subject matter experts, the Subcontractor will correct this information. The Subcontractor will revise each technical document to remove the identified inaccurate information, incorporate the updated information, and provide a detailed schedule (a timeline is acceptable) for recommended infrastructure improvements.

Reference materials required for review in support of this work **will** include, but are not limited to the following:

Table 3-1: Reference Materials¹

1.	RPP-13033, "Tank Farms Documented Safety Analysis."
2.	HNF-SD-WM-TSR-006, "Tank Farms Technical Safety Requirements."
3.	OSD-T-151-00007, Rev. 13, "Operating Specifications for the Double-Shell Storage Tanks."
4.	ORP-11242, Rev. 6, "River Protection Project System Plan."
5.	RPP-40149-VOL 1, Rev. 2, "Integrated Waste Feed Delivery Plan."
6.	RPP-5346, "Waste Feed Delivery Transfer System Analysis."
7.	RPP-SPEC-56967, Rev. 2, "Project T5L01 Low Activity Waste Pretreatment System Specification."
8.	24590 –WTP-ICD-MG-01-001, "Interface Control Document for Raw Water."
9.	24590 –WTP-ICD-MG-01-002, "Interface Control Document for Potable Water."
10.	24590 –WTP-ICD-MG-01-011, "Interface Control Document for Electricity."
11.	SVF-1805, "Electrical Pwr Needs for WFD & SST Retrieval_SVF-1805, R0.XLSX."

¹ Use latest revision where available.

Draft revisions of the technical documents will be reviewed by WRPS Mission Analysis Engineering Staff, with written comments provided to the Subcontractor. Both comments and comment resolutions will be in written form and documented. The Subcontractor will be responsible to resolve comments before preparing final technical documents. Once resolved, the Subcontractor will prepare final technical documents for WRPS approval.

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 A-6005-315). 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 may be sent to TOCVND@rl.gov or delivered via a WRPS designated File Transfer Protocol (FTP) site. Electronic formats must be non-password protected in one of the following formats:

- Microsoft® Office Compatible
- Portable Document Format (PDF)
- Tagged Image File Format (TIFF)
- Graphics Interchange Format (GIF)
- Joint Photographic Experts Group (JPEG)
- Windows Media Video (WMV)
- Moving Picture Expert Group (MPEG)
- Extensible Markup Language (XML)
- HyperText Markup Language (HTML)
- Comma Separated Values (CSV)
- Text (TXT)

5.0 Acceptance Criteria

Work products and services provided must meet established TOC procedures for control and review of work products, where applicable. These procedures include:

- TFC-ENG-DESIGN-C-06, “Engineering Change Control”
- TFC-ENG-DESIGN-C-10, “Engineering Calculations”
- TFC-BSM-AD-STD-02, “Editorial Standards for Technical Documents”

6.0 Configuration Management and Standards

6.1 Configuration Management Requirements

Configuration management requirements for this Release are based upon the types of engineering services being procured and include the TOC standards listed in Section 6.2 *Applicable Standards* and the statements below.

New or revised Technical Documents shall be prepared in accordance with TFC-BSM-AD-STD-02, *Editorial Standards for Technical Documents* and meet the document release criteria found in Table 3 of TFC-ENG-DESIGN-C-25, *Technical Document Control*.

New or revised Engineering Change Notices or Field Change Notices shall be prepared and submitted in accordance with TFC-ENG-DESIGN-C-06, *Engineering Change Control*.

6.2 Applicable Standards

There are no engineering codes or standards applicable to this scope of work. RPP-5227 and RPP-5228 are technical documents that support or are associated with HNF-4157, “Double-Shell Tank Utilities Subsystem Specification.” While these technical documents are associated with the specification, they are not themselves a specification, therefore no engineering codes or standards are applicable.

7.0 ESH&Q Requirements

7.1 Quality Assurance Requirements

The Subcontractor shall have a documented and implemented Quality Assurance Program.

7.2 Supplier Quality Assurance Program

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

7.2.1 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.

7.2.2 Quality Assurance Oversight

WRPS personnel will co-ordinate with the supplier to conduct scheduled and periodic oversight of activities or products associated with this scope of work.

7.3 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 N/A.

7.4 Special ESH&Q Requirements

Preliminary hazard assessment PHA ID: 31 is to be used for general office duties performed in TOC-controlled office facilities only. Prior to performing any activities outside of the office facility, a job hazard analysis (JHA) must be completed to cover the activities to be performed. The JHA must be approved by a TOC Safety Representative.

8.0 Verification/Hold Points

There are no verification/hold points associated with this scope of work.

9.0 Reserved

10.0 Work Location/Potential Access Requirements

Work will be performed at the Subcontractor's facilities and at the Hanford site. The Subcontractor must be prepared to make periodic visits to Hanford Site administrative/office areas (3170 POB BLVD, 2425 Stevens Center, 200 East/West Area, etc.). Site visits will be required to perform reviews and coordination of activities, as well as perform interviews with WRPS personnel to collect information for document revisions.

11.0 Training

The Subcontractor is expected to provide appropriately trained and qualified staff to perform the type of work specified. This shall include necessary expertise and training including necessary

continuing training programs to assure Subcontractor personnel maintain a current understanding of laws, requirements, and industry standards. The Subcontractor shall maintain company and regulatory required certifications and qualifications for personnel.

The Subcontractor shall be responsible for all costs associated with training and/or continuing education for Subcontractor employees that are not Hanford-specific training courses (e.g. commercially available training for certifications, etc.). Hanford-specific training courses will be scheduled by WRPS at no additional cost to the Subcontractor.

Subcontractor personnel required to be on site for more than six consecutive days in support of this subcontract shall, at a minimum, complete Hanford General Employee Training (HGET).

12.0 Qualifications

Minimum Qualifications: BA/BS degree or equivalent in engineering. The individual(s) performing the work shall have at least 10 years of relevant experience, of which at least 5 years shall be with a Department of Energy (DOE) or commercial nuclear facility.

The assigned Subcontractor personnel shall be familiar with DOE engineering practices and Hanford Site tank farms waste storage, transfer, support, and feed delivery systems. Personnel shall possess strong technical writing skills and must be able to synthesize a work product given multiple inputs.

13.0 Special Requirements

Hanford Site Access

Performance of onsite work in other than administrative facilities (such as 2750 E) requires the individual to call the Base Operations shift office prior to accessing the facility.

One System Personnel Nondisclosure Agreement (NDA)

Due to work involving DFLAW, it will be necessary for Subcontractor Personnel to sign 24590-MGT-F00087, Rev. 5, "One System Personnel Nondisclosure Agreement."

Use of Government Vehicles

There is no anticipated need for any Subcontractor employees to use a Government-furnished vehicle in the performance of this statement of work. The Subcontractor's employees, therefore, are specifically prohibited from driving any Government-furnished vehicles under the performance of this statement of work unless this statement of work is formally so modified by the parties and the employee(s) will present a valid driver's license to the BTR for review.

Government Property

Subcontractor employee will be working on site, using government-provided computers/work stations under the control of WRPS; therefore, this requirement does not apply.

14.0 Reporting/Administration

Subcontractor information including reports and other documents shall be submitted in either hard copy or electronic format as designated by WRPS. If electronic formatted documents are

required, the documents must be viewable using Microsoft® Windows®, Microsoft® Office, or Adobe® Acrobat® software. Assigned personnel are required to:

- Attend weekly status meetings as requested.
- Provide weekly schedule status reports as directed by the Technical Point of Contact or designee.
- Attend Safety meetings as directed by the BTR.
- Provide weekly reporting of progress and expected delays and impacts to the BTR.

15.0 Workplace Substance Abuse Program Requirements

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