

STATEMENT OF WORK

EOH Project – USS ██████████ Reverse Osmosis Deficiency Identification

1. SCOPE

- 1.1. Title: The Vendor is tasked to perform Reverse Osmosis (RO) Plant Performance Testing onboard the USS ██████████ for RO Plant No.1 and No.2 in accordance with (IAW) MRC 51 7DRK N so as to identify potential deficiencies with both Unit #1 and Unit #2.
- 1.2. Location of Work: ██████████ is at Portsmouth Naval Shipyard (PNS). Components are located shipboard in the Engine Room, Upper Level Aft.
- 1.3. Identification:
 - 1.3.1. Reverse Osmosis Plant No.1 and No.2., APL 76A040006X
- 1.4. Security Classification: Not Applicable. All Equipment and references are UNCLASSIFIED - CUI

2. REFERENCES

- (a) NAVSEA TM S9531-C7-MMA-010: Reverse Osmosis Unit Model VMT6000/3, VMT2X6000/3, and VMT2X6000/3SW
- (b) VMT DWG 13100, VMT6000/3 General Assembly
- (c) VMT DWG 13101, VMT6000/3 Submarine RO Unit, Piping Schematic
- (d) VMT DWG 13131, VMT6000/3 Submarine RO Unit, Structural Frame G/A
- (e) VMT DWG 13141, VMT6000/3 Submarine RO Unit, Piping Assy, SW Inlet to P1
- (f) VMT DWG 13142, VMT6000/3 Submarine RO Unit, Piping Map, 1st pass HP
- (g) VMT DWG 13143, VMT6000/3 Submarine RO Unit, Piping Map, 1st pass Permeate

3. REQUIREMENTS

- 3.1. Operational Testing IAW MIP 5315 S-2 Reverse Osmosis Performance Test (7DRK) shall be performed IAW the initial conditions and requirements of Reference (a).
 - 3.1.1. Raw data obtained during the performance of MIP 5315 S-2 Reverse Osmosis Performance Test (7DRK) shall be provided in the final condition report to PNS Project Team. This report will document any deficient conditions that require correction for proper operation of the units.
 - 3.1.2. Prior to operation in the performance of MIP 5315 S-2, the installation of the 3-micron filter (F1) shall be verified on both units.
- 3.2. Upon receipt of final condition report – PNS Project team will determine the repairs required by vendor and/or with vendor support. This requirement shall be treated as an option or new contract.

4. RESPONSIBILITIES

- 4.1. The vendor shall provide labor, management, supervision, tools, transportation, shipping, and equipment necessary to identify all deficiencies on RO Units #1 and #2 to the PNS Project Team.

- 4.2. Vendor shall maintain their worksite in reasonable condition of cleanliness, with vendor policing of worksite to remove vendor-generated waste and industrial debris occurring once per shift worked.

5. DELIVERY / RETURN

- 5.1. Elements of the Vendor Responsibilities (Section (4)) shall be completed within the performance period of the contract.
- 5.2. A completion letter shall be forwarded to the PNS business agent no later than two weeks after completion of Vendor Work.
- 5.3. A final report from the Vendor shall be provided to the PNS Project Team no later than 30 Calendar Days after completion of work. Condition/Trouble reports written during performance of this effort shall be included in the final report.

6. GENERAL

6.1. Scheduling, Hours of Work, and PNS Support:

6.1.1. Portsmouth Naval Shipyard Production Team hours of work are Monday through Friday 06:30-15:00, with weekends, holidays and extended work day hours determined and approved by the Project Superintendent. The Ship's Commanding Officer determines and sets the Ship's duty hours.

6.1.2. Contractor will provide a list of personnel expected to work during the weekend prior to close of business on the Tuesday before the weekend to the project Work Integration Leader (WIL).

6.1.3. Ships Services may be limited and or not available on nights weekends and holidays. Prior coordination and approval should be done through the project WIL.

6.2. Security Requirements:

6.2.1. Vendor shall provide documentation of US Citizenship and Security Clearance Information for all workers.

6.2.2. Vendor shall submit visit requests via the Joint Personnel Adjudication System (JPAS) to SMO 39040 for verification of Security Clearances.

6.2.2.1. If the Vendor does not have JPAS Access, a Visit Authorization Letter shall be signed and submitted by the company Facilities Security Officer verifying US Citizenship and the level of Security Clearance Granted to each employee on the visit request.

6.2.3. All contractor employees performing duties under this contract must have, at a minimum, a final adjudicated Confidential Personnel Security Clearance (PCL) granted prior to being assigned to perform work at this facility.

6.3. Technical Work Documents:

6.3.1. The contractor is responsible for the following:

- 6.3.1.1. All work will be performed in accordance with a Technical Work Document (TWD) that identifies the step-by-step procedure for accomplishing the work. Working to drawings alone is not permissible.
- 6.3.1.2. TWDs that are authorized by PNS, as the Lead Maintenance Activity (LMA), are mandatory and shall be present at the work site when performing each and all phases of work and testing.
- 6.3.1.3. Completed TWDs (or logical portions of TWDs) shall be forwarded in a timely manner to Chief Test Engineer-Weapons (CTE-W) and/or CTE Hull Mechanical & Electrical (HM&E) for review to ensure smooth transition from phase to phase of work (i.e. rip out to reinstallation to testing).
- 6.3.1.4. Provide a copy of all Test Procedures (TP) to be accomplished to PNS and Ship's Force, at least six (6) weeks prior to commencing testing.
 - 6.3.1.4.1. Ensure all test documents submitted for execution, and addition to the List of Authorized Tests (LAT), are final approved with all approval pages included.
 - 6.3.1.4.2. All Test documents submitted must be formatted to meet the requirements of reference (b), DDGOS Section 9020-9a, and NAVSEA Standard Item 009-04.
 - 6.3.1.4.3. Test documents must be groomed to be applicable to the specific hull, and work performed prior to submittal.
 - 6.3.1.4.4. Test documents that do not meet these standards will be returned to the executing activity for upgrade.
 - 6.3.1.4.5. Provide PNS Project non-Nuclear Chief Test Engineer (CTE) (HM&E) a list of all systems required to support system testing.
- 6.3.1.5. Submit a copy of all certified TPs to the Project CTE-W for review prior to out brief. Any test submitted for review with data that is out of specification, or incomplete, shall be accompanied by an approved Departure from Specification (DFS) documenting all incomplete or out of specification test results. Out briefs will not be accomplished prior to the CTE review.

6.4. Communication and Scheduling:

6.4.1. The contractor is responsible for the following:

- 6.4.1.1. Attend an in-brief at PNS. The in-brief will include Code 246's Work Control Group (WCG) Team Leader to review tag-out techniques used at PNS. No work will commence until an in-brief is held.
- 6.4.1.2. Attend an Out-Brief at PNS. The contractor shall out-brief each time they depart PNS when work is completed in stages. The contractor shall not depart PNS without performing an Out-Brief.

- 6.4.1.3. Provide a detailed schedule of work to be accomplished, including subsequent testing and required re-certification, with anticipated duration and completion dates. Identify predecessor work required to be accomplished by PNS or other contractors. Coordinate on-going work with concurrent Ship work.
- 6.4.1.4. Provide a written daily status report to PNS Work Integration Leader (WIL) and the Ship's Availability Coordinator.
- 6.4.1.5. Update PNS, the Ship's Duty Officer and Availability Coordinator of progress and/or changes in schedule.
- 6.4.1.6. Representative attend the daily morning production meetings, when requested.
- 6.4.1.7. Representative attend the daily interface meeting, when requested.
- 6.4.1.8. Provide two (2) working days' notice to the ship if Ship's Force support is required.
- 6.4.1.9. Provide two (2) working days' notice for required services form PNS.
- 6.4.1.10. Prior to commencing any testing conduct a pre-evolution brief with the Ships Duty Officer (SDO).

6.5. Deliverable Acceptance Criteria:

- 6.5.1. Final inspection and acceptance of all work, reports, and other deliverables will be performed by the Government Subject Matter Expert (SME) at the place of delivery. General quality measures, as set forth below, will be applied to each work product delivered under this statement of work:
- 6.5.2. Accuracy - Deliverables shall be accurate in presentation, technical content, and adherence to accepted elements of style.
- 6.5.3. Clarity – Deliverables shall be clear and concise. Any/all diagrams/text shall be easy to understand and be relevant to the supporting narrative.
- 6.5.4. Consistency to Requirements - All deliverables must satisfy the general requirements of this statement of work as well as the specific requirements of each Task Order.
- 6.5.5. Timeliness - Deliverables shall be submitted on or before the due date specified by the Government.

7. PERIOD OF PERFORMANCE

- 7.1. The Period of Performance (POP) for work accomplished by contractor is measured by Project schedule key events (KE) tied to and using specific milestones (MS) to manage productivity.
 - 7.1.1. Period of Performance window: 8/1/2023 – 11/1/2023
 - 7.1.1.1. Service must be completed by 11/1/2023