

DEPARTMENT OF HOMELAND SECURITY (DHS)



FEDERAL EMERGENCY MANAGEMENT AGENCY

STATEMENT OF OBJECTIVES

Technical Support Services

Transportable Temporary Housing Quality Assurance and Forensic Analysis

Statement of Objectives

BACKGROUND: The Federal Emergency Management Agency (FEMA) is seeking Technical Support Services of a contractor to support its Manufactured Housing Unit (MHU) Program through quality monitoring and investigations of manufactured homes and other Transportable Temporary Housing units (TTHUs). The FEMA MHU program oversees the entire TTHU lifecycle, which includes development of requirements, purchase, storage, transportation, installation, maintenance, deactivation, and disposal. FEMA provides TTHUs under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (Stafford Act) and related authorities as well as through the Economy Act and other legal authorities. The Stafford Act authorizes FEMA to provide direct temporary housing, acquired by purchase or lease, to individuals or households who would be unable to make use of financial assistance due to a lack of available housing. FEMA uses TTHUs to provide for this need. FEMA defines a TTHU as a dwelling, acquired by purchase or lease, that are designed to be transported in addition to being able to be used for housing for a limited period of time.

FEMA primarily uses manufactured homes. FEMA may also use other TTHUs, including but not limited to modular homes, recreation vehicles (RVs), collapsible, soft-sided structures, tiny homes, and hard-sided container homes. TTHUs must be in compliance with established industry standards—e.g. Manufactured Homes with U.S. Department of Housing and Urban Development (HUD) standards, set forth in 24 CFR 3280 the Manufactured Home Construction and Safety Standards; Recreational Vehicles must be constructed under the consensus standards promulgated by the Recreational Vehicle Industry Association (RVIA); etc. In addition, FEMA has developed performance requirements for MHUs that enhance the HUD standards and describe the types of MHUs that FEMA requires. These requirements are found in the most current MHU manufacturing contracts, including FEMA’s Rugged Based Requirements, which FEMA will provide to the contractor.

For manufactured homes, the contractor’s efforts shall be independent of the Production Inspection Primary Inspection Agencies (IPIAs); the Design-Approval Primary Inspection Agencies (DAPIAs); other entities who are permitted under HUD Regulations to monitor the manufacturing of MHUs; and the manufacturer’s quality process. For other types of TTHUs similar restrictions shall apply when applicable.

Disclaimer: All Prime and Sub-Contractor on HSFE80-17-R-0005 (FY18 LOGHOUSE Contract) are prohibited from competing on the TSS contract due to the potential for a conflict of interest between service providers.

PURPOSE: FEMA is seeking technical support from contractors to ensure the Agency’s effectiveness in executing its mission to provide transportable temporary housing. Contractors will observe and provide recommendations for design and production processes to ensure that FEMA receives high quality TTHUs that are ready for deployment when an incident occurs. Throughout the TTHU lifecycle (from design through disposal), the contractor will investigate, analyze, and recommend changes when issues are discovered in the program. The Agency understands that the results of these services will lead to better TTHUs.

SCOPE: This contract shall encompass the following phases of the TTHU lifecycle: Design, Production, Transportation, Storage, Use, and Deactivation/Disposal. During any of these phases, the contractor may be called upon to review designs, production facilities, or individual

TTHUs to determine if there are any design, health/safety, or product issues related to construction, transportation, operational, or environmental issues. The contractor shall conduct forensic analysis and investigations, as required, to determine the root cause of defects, damages, or failures. The contractor may also be tasked with other projects related to the goals of this requirement.

The contractor shall ensure that the TTHUs adhere to established industry standards, FEMA contract requirements, the Uniform Federal Accessibility Standards (UFAS), National Fire Protection Association (NFPA) standards, NFPA 13 D, and other applicable regulations and standards.

The contractor shall have expertise in the manufactured home industry and shall be familiar with various types of TTHUs. The contractor shall provide all labor, materials, tools, and equipment (unless specified as government-provided property).

The contractor may have to work with or interact with state, local, tribal, territorial governments and their regulatory agencies, including but not limited to the following:

- Building Inspection
- Planning
- Zoning
- Law Enforcement
- Fire Departments of Public Safety

FEMA meets the needs of individuals with access and functional needs by requiring that a percentage of the MHUs are built to meet the Uniform Federal Accessibility Standards (UFAS) standards, which are the Federal Government's implementation of the Architectural Barriers Act (ABA), as amended (42 U.S.C. §4151 et seq.) and Section 504 of the Rehabilitation Act (Rehab Act), as amended (29 U.S.C. §701). The ABA requires facilities to be accessible to people with disabilities when they are designed, built, altered, or leased with funds supplied by the Federal Government. Because it is a key requirement for certain units to be built to UFAS, the contractor must have an understanding of the UFAS and their implementation in FEMA MHUs.

FEMA also has an internal policy that requires MHUs to be built with Residential Fire Sprinkler Systems. FEMA requires the Residential Fire Sprinkler Systems in FEMA MHUs to comply with the following National Fire Protection Association (NFPA) standards, as of 2017 or more recent:

- NFPA 501—Standard on Manufactured Housing
- NFPA 501A—Standard for Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities

- NFPA 13D—Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes

FEMA installs TTHUs for disaster survivors at the following locations:

- Private sites—sites located on private land that either the disaster survivor or someone known by the survivor owns
- Commercial sites—existing manufactured home parks operating as a commercial business
- Group sites—FEMA-built manufactured home parks for disaster survivors

For MHUs, the contractor may be required to consult with MHU vendors; HUD; HUD-approved Production Inspection Primary Inspection Agencies (IPIAs) and Design-Approval Primary Inspection Agencies (DAPIAs); State agencies and private third party agencies that inspect manufactured homes at various stages of production; FEMA storage sites; and FEMA installation contractors. Information regarding the IPIAs can be found at 24 CFR 3282.362, and information regarding the DAPIAs can be found at 24 CFR 3282.361. Some of the third party agencies also approve the manufacturer's designs to ensure that plans are consistent with HUD standards. There will be additional stakeholders that are included for other types of TTHUs.

PLACE OF PERFORMANCE

The place of performance will be at one of the following locations:

- The Contractor's facility
- TTHU manufacturing facilities
- FEMA Headquarters – 500 C Street SW Washington, DC 20024
- FEMA's Manufactured Housing Storage Sites (MHSSs) – Cumberland, MD and Selma, AL
- FEMA's Manufactured Housing Staging Areas (MHSAs) – In Disaster-Affected Areas
- Other locations within the contiguous United States

FEMA may require the contractor to perform some or all required tasks simultaneously at multiple locations.

PERIOD OF PERFORMANCE:

The Period of Performance is one (1) twelve (12) month base period from the date of contract award with four (4) one (1) year option periods.

PERFORMANCE OBJECTIVES, GOALS AND OUTCOMES

I. Overall Objectives

- **Personnel:** The contractor shall provide qualified personnel with the proper skill sets and experience and the required number of personnel to accomplish the performance objectives.
- **Materials:** The contractor shall provide all necessary supplies, spare materials, tools, test equipment, consumables, hardware, software, automatic data processing equipment, documentation, and other applicable properties (Unless otherwise directed by FEMA).
- **Facilities:** No facilities are required in this solicitation.
- **Organizational processes:** The contractor shall provide internal controls, management oversight, and supply support.
- **Reporting:** The contractor shall provide applicable reports in formats agreed to by FEMA.

II. Contract Objectives

This contract will support the MHU Program by providing the following services through each phase of the TTHU lifecycle:

Design Phase (refer to 5.5.1 and 5.5.5)

- Review current and future TTHU designs to provide expert opinion as to the design's compliance with FEMA's requirements in direct support of a FEMA TTHU mission or at other times as required
- Review FEMA's TTHU requirements and provide suggestions that could enhance the requirements and/or make the TTHUs easier to manufacture to help improve current and future solicitations

Production Phase (refer to 5.5.2)

1. Provide adequate personnel to Perform in-plant inspections and monitoring of the quality assurance program and manufacturing process

2. Conduct forensic analysis and investigations of potential defects to determine the root cause
3. Review vendor's proposed repairs

Storage and Use Phases (refer to 5.5.3 and 5.5.4)

- Analyze issues that have developed in MHU program items and provide corresponding description and methodology for repairs
- Conduct environmental, health and safety reviews and/or investigations of TTHUs to determine if there are any issues that could impact health or safety
- Conduct post-damage environmental, health and safety reviews of TTHUs
- Conduct post-event analysis in the case of a fire in a TTHU to determine cause
- Conduct post-event analysis of the effectiveness of the residential fire sprinkler system
- Conduct post-event analysis of the residential fire sprinkler systems and/or fire detection systems for compliance with relevant FEMA's contract requirements, HUD Standards, FEMA Rugged Based Requirements, UFAS, NFPA 501, NFPA 501A, and NFPA 13D
- Provide recommendations if there are issues resulting from manufacturing, storage, transportation, installation, or maintenance
- Investigate root causes of issues within TTHUs, such as fires, leaks, and all other potential failures within TTHUs
- Conduct failure mode analysis (FMA); failure mode and effects analysis (FMEA); and/or failure mode, effect, and criticality analysis (FMECA) on commercial or other program items
- Review TTHU and associated systems performance
- Complete other technical support services for TTHU quality assurance and forensic analysis, as needed.

III. Technical objectives

The contractor's PWS shall propose services to accomplish the technical objectives of the project, which include the following:

- Reduce the initial procurement and lifecycle costs of the units

- Improve the quality of TTHUs
- Enhance FEMA requirements
- Propose new requirements for future FEMA procurements
- Recommend areas of improvement
- Perform inspections
- Determine causes for any defects in TTHUs
- Ensure work is performed without impacting FEMA milestones
- Develop and document procedures for managing the contract, including a Quality Control Plan
- Recommend process improvements
- Ensure manufacturers meet or exceed all FEMA, HUD, and NFPA requirements
- Achieve improved performance, reliability, and reduced cost of the delivered service throughout the life of this effort. FEMA anticipates a potential cost reduction after the base year.

IV. Program objectives

The contractor's PWS shall propose technical support services to accomplish the program objectives of the project, which include the following:

- Assist FEMA's goal of providing high quality TTHUs to disaster survivors
- Assist FEMA's goal of ensuring that manufacturers meet the contract requirements
- Assist FEMA with monitoring contract quality
- Determine the root causes of TTHU and related system deficiencies
- Reduce manufacturing and production cost
- Improve performance

V. Performance Work Statement Requirements

The contractor shall provide a Performance Work Statement (PWS), which shall propose how the contractor will perform the monitoring, inspections, reviews, analyses, and investigations for review of TTHU designs; in-plant inspection and monitoring of TTHU manufacturing; forensic analysis (root cause analysis); TTHU safety, health, and environmental reviews; and review of FEMA's TTHU requirements.

a) Review TTHU designs

The contractor's PWS shall propose services to ensure that current and future TTHU designs meet FEMA's requirements, applicable regulations, and all required certifications. Review of current designs shall include the review of specific elements of existing MHU designs, and may include up to a full design review of existing MHU designs. Review of future designs shall include a full design review of future MHU designs and may include a full design review of other future TTHU designs.

At a minimum, the contractor shall:

- Verify the TTHU designs' compliance with established industry standards and other applicable regulations and identify instances of non-compliance;
- Verify that each vendor's written quality assurance programs reflect best practices and contain bona-fide methods for assuring homes can be built in compliance with FEMA's requirements and identify areas that require improvement
- Identify areas of potential improvement for the TTHU designs
- Evaluate future changes proposed by the manufacturers for their designs and identify how the proposed changes will impact the quality, cost, schedule, and risk for TTHUs
- Provide technical support (SMEs, etc.), as needed

b) In-Plant Inspections and Monitoring of TTHU manufacturing

The contractor's PWS shall propose services to ensure that the TTHU production plant/facility and quality assurance and manufacturing processes are adequate, meet applicable regulations, and have obtained all required certifications. Also, the contractor shall provide services during production to ensure that the TTHU meets all applicable FEMA Rugged Based Requirements.

At a minimum, the contractor shall perform the following actions in the planning, production, or post-production stages, as applicable:

Planning

- Develop uniform monitoring/auditing procedures
- Develop quality monitoring checklists
- Schedule audits
- Recommend audit frequency based on quality data

During Production

- Conduct audits at each active TTHU plant
- Conduct audits of TTHUs while they are in production
- Prepare and analyze in-plant audit reports

- Ensure that manufacturer and other in-plant inspections are occurring in accordance with FEMA's quality procedures and the manufacturer's Quality Control Plan
- Review and evaluate the TTHU factory processes
- Review and evaluate the TTHU production line
- Perform inspections of the factory to ensure the manufacturers have adequate quality control
- Identify any issues that could impact the manufacturer capacity of production
- Identify any issues that could lead to quality or performance issues
- Evaluate and analyze if the manufacturer is continuously following all provisions and aspects of its approved quality assurance manual
- Evaluate and ensure any and all parts of the TTHU conform with the FEMA Rugged Based Performance Requirements
- Evaluate TTHUs in production that fail to conform with the design or standard; ensure that the failure to conform is corrected before the TTHU leaves the manufacturing plant
- Ensure the manufacturer's inspections are effective

Post-Production

- Conduct post-production audits
- Conduct post-production follow up audits/consumer sites
- Evaluate and ensure any and all parts of the TTHU conform with the FEMA Rugged Based Performance Requirements

All Stages

- Provide recommendations for changes and enhancements
- Monitor compliance with regulations and the FEMA Rugged Based Performance Requirements
- Reporting all findings and results to the COR and other designated government officials

- Monitor compliance with regulations and the FEMA Rugged Based Performance Requirements
 - Refer all issues of non-compliance to the government representative
 - Perform inspections in accordance with the offeror's written procedures
- c) Forensic analysis (Root Cause Analysis), investigations and Technical Assistance

The contractor's PWS shall propose technical support services to perform forensic analysis (root cause analysis) and investigations during the period of performance.

At a minimum, the contractor shall

- Perform root cause problem analysis for issues that may arise before, during, and post-production
- Find and propose a solution/alternative to issues/problems
- Maintain records of issues, including but not limited to the cause, manufacturer, resolution, and mitigation strategy for use in future contracts
- Perform inspections in support of forensic analysis of the factory to ensure the manufacturers have adequate quality control
- Maintain records of important conversations/meetings
- Provide technical expertise to assist the government when non-compliance occurs
- Propose recommendations for solutions to non-compliance or other issues by the manufacturer and provide feedback to the government representative;
- Work with the government representative to carry out inspections and other investigations
- Analyze new technical issues
- Coordinate with the IPIA, DAPIA, the government representative, and manufacturers to facilitate satisfactory resolution of any issues that may occur
- Conduct design and instruction review to evaluate and make recommendations on each special request
- Coordinate and assist the review of special alternative construction proposals that may be needed to build homes that are not in conformance with one or more HUD Standards

- Assist with all follow-up monitoring and assessment activities, including site investigation, records reviews, and telephone discussions
- Perform environmental analysis.

d) TTHU Safety, Health, and Environmental Reviews

The contractor's PWS shall propose technical support services to execute and deliver comprehensive industrial hygiene, safety, and environmental health to ensure TTHUs do not adversely affect the well-being of disasters survivors.

At a minimum, the contractor shall:

- Be a subject matter expert (SME) and possess experience with conducting occupational safety, safety engineering, industrial hygiene, or environmental health evaluations
- Develop applicable sampling strategies for performing area, personal, baseline, and ambient air monitoring for chemicals and other hazards as identified in sampling strategies, hazard assessments, or historical background
- Perform third party quality assurance and quality control development, including oversight and review of occupational safety; safety engineering; industrial hygiene and environmental health issues; and projects or concerns
- Develop applicable sampling strategies for collecting and analyzing air and surface samples for contaminants not commonly associated with baseline indoor air quality or environmental evaluations, such as volatile organic compounds (VOCs), formaldehyde, hydrogen sulfide, carbon disulfide, carbonyl sulfide, and others as requested
- Conduct indoor air quality assessments, hygiene assessments, and mold/microbial growth assessments of the FEMA TTHUs
- Have industry recognized certifications and capability to perform applicable studies
- Possess adequate equipment to perform industrial hygiene, safety, and environmental health evaluations of TTHUs
- Maintain, store and share data gathered during assessments and evaluations, including written reports, environmental readings, facility/building characteristics, and other applicable parameters
- Analyze data and provide written technical reports with data interpretation and recommended courses of action

- Evaluate TTHUs for recognized hazards, including but not limited to, asbestos-containing materials, lead-based paint, or radon
- Conduct fire protection assessments, including but not limited to life safety assessments, fire suppression system evaluations, and compliance evaluations with other fire protection standards
- Conduct other safety and environmental health related activities, as assigned
- Perform inspections on TTHUs to ensure they meet safety, health, and environmental applicable standards
- Provide final results and recommendations of the studies performed
- Provide recommendations for corrective actions to ensure TTHUs are in compliance with applicable environmental, safety, and health standard
- Conduct environmental assessments of units if there is damage (e.g., from water intrusion).

e) Review FEMA's TTHU requirements

The contractor's PWS shall propose technical support services to enhance current requirements to obtain high quality, cost-effective units.

At a minimum, the contractor shall

- Review FEMA Rugged Performance Based Requirements
- Develop new requirements to be provided to FEMA for consideration for future use based on findings of monitoring and inspection activities
- Document lessons learned and propose new requirements
- Develop recommendations for new requirements based on new technology
- Find areas of improvement in the requirements, and develop new requirements that will lead to a better, cost-effective solution
- Research issues, using existing information to the greatest extent possible, regarding acceptance or new technologies, products, components, and designs to determine conformance to existing standards
- Prepare and provide recommendations, draft correspondence, and position papers to improve performance requirements.

PERFORMANCE METRICS

The contractor's PWS shall propose metrics or standards to determine if the contract, technical and program objectives and outcomes are met.

CONSTRAINTS

The services identified in this Statement of Objectives (SOO) will adhere to the rules, regulations, laws, standards, and conventions identified by FEMA as well as those within the Federal Government. Constraints may include but are not limited to the following:

- HUD generally implements the monitoring portion of its program through two sets of regulations:
 - (1) 24 CFR 3280—Manufactured Housing Construction and Safety Standards (the Standards), which is a nationally preemptive set of standards for the design and construction of these homes (commonly known as HUD Code)
 - (2) 24 CFR 3282, Manufactured Housing Procedural and Enforcement Regulations (the Regulations), which generally govern the enforcement of the HUD Code.
- The National Manufactured Housing Construction and Safety Standards Act of 1974 (the Act), implemented in June 1976—located on HUD's website
- Established industry standards for other TTHUs, including the consensus standards promulgated by the Recreational Vehicle Industry Association (RVIA)
- Due to the nature of the requirement, the contractor shall expect changes in the industry that may occur during the course of performance, including but not limited to:
 - ❖ The quality, number of plants, and production totals of TTHUs
 - ❖ The number of design packages and drawings generated
 - ❖ The type of TTHUs and applicable standards required
 - ❖ The frequency and extent of natural disasters
 - ❖ The type and numbers of post-design or post-production problems experienced in the field
 - ❖ Problems with the quality control operations, which could require increased or shifted monitoring and audits
 - ❖ Special factory, retailer, transport, installation, or site inspection issues
 - ❖ New regulations or statutory requirements.

ADDITIONAL DETAILS

I. Award Overview

FEMA anticipates that this solicitation will result in either a single award Indefinite Delivery, Indefinite Quantity (IDIQ) contract or a single award Requirements Type contract. FEMA will issue task orders under this contract, as required to meet the needs of the Agency's disaster response/recovery operations. There is no minimum guarantee under these contracts.

II. Certifications

All employees conducting system analysis and compliance assurance shall possess and maintain current professional certifications in accordance with ASTM E-541 during the execution of this contract.

All compliance assurance auditors are to be certified as quality auditors by the American Society of Quality (ASQ) or equivalent.

QUALITY ASSURANCE SURVEILLANCE PLANS

Offerors shall include their Quality Assurance Surveillance Plan (QASP) as part of their proposal. These plans shall focus specifically on the following two areas:

- How the contractor will ensure the quality of forensic investigations of TTHUs post-delivery of units
- How the contractor will ensure quality in the level of services they are providing

ORGANIZATIONAL AND PERSONAL CONFLICTS OF INTEREST (OCI/PCI) PLAN

Contractors shall provide a written code of business ethics and conduct applicable to contractor personnel working on this technical support services contract to

- Prohibit contractor personnel from participating in a government contract in which they have a personal conflict of interest
- Require contractor personnel to avoid the appearance of loss of impartiality in performing contracted duties for FEMA
- Require contractor personnel to disclose personal conflicts of interest to their employer prior to beginning work on this contract
- Require the contractor to review and address any personal conflicts of interest its employees might have before assigning them to deliver contracted services
- Prohibit contractor personnel from using non-public government information obtained while performing work under the contract for personal gain

- Prohibit contractor employees providing procurement support services from having future employment contact involving a bidder in an ongoing procurement
- Impose limits on the ability of the contractor organization and its employees to accept gifts (defined as almost anything of monetary value, such as cash, meals, trips, or services) in connection with contracted duties
- Prohibit misuse of FEMA contract duties to provide preferential treatment to a private interest
- Report any contractor personal conflict of interest violations to the applicable contracting officer or contracting officer's representative as soon they are identified
- Maintain effective oversight to verify compliance with personal conflict of interest safeguards; have procedures in place to screen for potential conflicts of interest for all employees in a position to make or influence findings, recommendations, and decisions, regarding FEMA contracts and other quality control and assurance functions. This screening can be done on a task-by-task basis or on an annual basis, such as a financial disclosure statement.

NON-PERSONAL SERVICES

In performance of this contract, the contractor will provide services as required by program offices to support management of their overall mission. This will be based upon the task order's performance work statement for the specific effort. Orders will be formally issued to the contract awardee as opposed to individual contractor awardee employees.

The services required under the contract constitute professional and management services within the definition provided by FAR 37.201. Under this contract, the Government will obtain professional services, which are essential to the FEMA mission but are not otherwise available within FEMA.

The Government will neither supervise contract employees nor control the method by which the contractor performs the required tasks. Under no circumstances shall the Government assign tasks to or prepare work schedules for individual contract employees. It shall be the responsibility of the contractor to manage its employees and to guard against any actions that are of the nature of personal services or give the perception of personal services. If the contractor feels that any actions constitute or are perceived to constitute personal services, it shall be the contractor's further responsibility to notify the contracting officer immediately.

These services shall not be used to perform work of a policy, decision making, or management nature. All decisions relative to programs supported by the contractor will be the sole responsibility of the Government.