

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE	PAGE OF PAGES
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2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
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6. ISSUED BY CODE		7. ADMINISTERED BY (If other than Item 6) CODE	
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8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)	(X)	9A. AMENDMENT OF SOLICITATION NO.
		9B. DATED (SEE ITEM 11)
		10A. MODIFICATION OF CONTRACT/ORDER NO.
		10B. DATED (SEE ITEM 11)
CODE		FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED
16B. UNITED STATES OF AMERICA (Signature of Contracting Officer)	16C. DATE SIGNED

**SUMMARY OF CHANGES TO
Performance Work Statement (PWS)
SP0600-04-R-0003
Amendment 0005
NSA Souda Bay, GR**

Table 1, Hours of Operation, Page 6: Weekday duty hours for the Site Manager and Assistant have been set to 0800-1600 to show that the management team must be on duty or engaged in contract related duties applicable to the NSA Souda Bay fuels contract.

Table 1, Hours of Operation, Page 6: Hours for the service station have been set and notes applicable to the service station function changed to show that the station will be automated for the service of Government vehicles but overseen/controlled by the dispatcher during the hours outlined for issues to POVs. As indicated, the dispatcher shall not be assigned collateral duties or pulled away from the station during those hours.

C-1.9.2.3.1, Qualifications, Page 9: A statement has been added to show that the dispatchers shall not be assigned collateral duties or removed from the dispatch desk during the service station hours depicted in Table 1.

C-2.2.2.3.1, Mobile Fuel Servicing Equipment, Page 13: At the top of page 14, a note has been added to indicate that one (1) the contractor furnished refuelers shall be a dedicated defueler.

C-2.3.4.1, Bulk Output, Page 16: Note the minor word change to the last sentence.

C-2.3.4, Requirements, Page 16: Note the minor word change and deletion of the reference to a day tank in the last sentence.

C-3.1.2, Prime Mover, Trucks and Tractors, sub-paragraph **C-3.1.2.1, General, Page 35:** The section has been change to clarify configuration requirements and compliance/exceptions to federal standards applicable to the fuel servicing trucks to be provided. Page 36 is the result of repagination.

C-3.1.4, Defueler, Pages 42-44: The section has been changed to show that a standalone tank/pump defueler is not required and that one of the contractor furnished refuelers shall serve as a dedicated defueler.

Table 1 Hours of Operation

Hours of Operation (by function)			
Function ⁽¹⁾	Monday-Friday	Saturday & Sundays	US & GR Holidays
Site Manager (SM)	0800-1600	As may be required	
Assistant Site Manager (ASM)	0800-1600	As may be required	
Fuel Dispatch Center (D/CO) ⁽²⁾	0000-2400	0000-2400	0000-2400
Aircraft Fuel Servicing Operations ⁽³⁾ (D/SO)	0000-2400	0000-2400	0000-2400
Ground Fuel Delivery ⁽⁴⁾ (D/SO)	0800-1800	0800-1800	0800-1800
Mechanic (MVM) ⁽⁵⁾			
Bulk Storage Operations ⁽⁶⁾ (FDSO/FDSM)	0800-1600		
Service Station Operations ⁽⁷⁾ (FDSO)	0800-1800	1000-1600	1000-1600
Quality Surveillance (FDSO/FLT) ⁽⁸⁾	0800-1600		

- (1) The entry following the functional description is the code for the employee/worker that would normally fill the position applicable to that function. See [Section C-1.9.1, Essential Personnel](#), and [Section C-1.9.2, Service Personnel](#). An indented line of activity indicates it is or may be a collateral duty of the preceding line. The specific time segments, i.e., Ground Fuel Delivery, Monday-Friday, 0800-1800, are provided for basic planning purposes. These specific time spans should not be construed to mean or imply that the function is undertaken only for the specified time indicated. As noted in [Section C-1.7.1, Contract Coverage](#), “the Contractor shall be fully capable of responding to demands for “all” fuel support and services anytime, 24 hours per day, year-round.”
- (2) The dispatcher shall not be assigned collateral duties for the hours depicted for Service Station Operations. During those hours, the dispatcher shall oversee the service station, monitor self service issues to POVs, and collect/control NEX coupons presented. The station is automated for issues to Government vehicles.
- (3) Includes any and all fixed (direct fueling system) and mobile (truck) refueling/defueling of aircraft as may transit, deploy to, or exercise from the contracted activity. Also includes the servicing of facilities and equipment as may be requested by authorized customers. Personnel assigned may include drivers, system operators, a mechanic, and other skilled personnel required and necessary to satisfy aircraft fuel servicing demands and other collateral duties identified herein.
- (4) Ground fuel delivery, to include all grades of automotive gasoline, diesel fuel, heating oil, and jet fuel used in lieu of diesel may be a collateral duty to the driver/operators that provide aircraft fuel-servicing support. Ground fuel operations may include scheduled deliveries to outlying equipment sites and areas. Also see [Section C-2.4.3, Alternate Issues, Method, and Manning](#), regarding alternate ground fuel (service station) support operations.
- (5) May be a collateral duty of a qualified [D/SO, Driver/system Operator](#).
- (6) To include the manning as may be required to conduct end-of-month/fiscal-year inventories that fall on a Saturday, Sunday, or US/Greek holidays. If applicable, also includes manning for extended pipeline/barge receipt operations. See the [Exhibit of Product Receipts](#) to determine the number of pipeline/barge receipt operation per year.
- (7) An automated self-service facility open to Government vehicles 24/7. The station is manned to the extent necessary to undertake system inspections, perform PM and inventories, and to receive products; however, see [Section C-2.4.3, Alternate Issues, Method, and Manning](#) regarding alternate ground fuel (service station) support operations. The times depicted represent the hours the station is open to POV services of MOGAS and overseen by the dispatcher who shall be responsible for the collection/control on NEX gasoline coupons.
- (8) Qualified persons assigned to the Bulk Fuel Storage operation may perform fuel laboratory duties. The hours indicated allow for sampling/testing of equipment at/during equipment/facility inspections and the release of equipment for use during normal weekday duty hours. The Contractor shall also, to the extent required and requested, sample equipment, facilities, and aircraft defuels and perform quality testing necessary to satisfy weekend/holiday quality surveillance workload.

C-1.8 Staffing

C-1.8.1 General: The Contractor shall provide the management and supervisory staff and labor to accomplish all petroleum receipt, storage, product handling, and issue operations, as well as all the related tasks identified in [Section C-2.0, Specific Tasks](#). The Contractor’s staffing shall be flexible and fully capable of meeting the demands of multiple aircraft servicing operations via mobile refuelers, direct refueling system, and/or a combination of both to provide for hot or cold refueling services. Furthermore, the Contractor shall staff to undertake all required service station, quality surveillance, accounting, and other related services as may be outlined herein.

Note

For the purposes of this PWS, the term “fuel servicing operations” shall be construed to include the handling of fuel products such as but not necessarily limited to turbine (jet) fuels, aviation gasoline, automotive gasoline, diesel fuel, heating oils, turbine fuels used in lieu of diesel fuel, used oil, recyclable jet fuel, and oily water.

C-1.9.2.3 Dispatcher/Computer Operator IV (D/CO) Each Fuel Management dispatch her/computer operator, hereafter referred to as a “dispatcher,” shall be computer literate. He/she shall possess sufficient computer skills to use client/server applications in a Microsoft Windows NT environment. Those skills shall include the ability to logon; shutdown; initiate modems; manipulate files; install applications; send and receive email; and to use web browsers to send and receive information. He/she shall also be familiar with the use of Microsoft standard office products such as Word and Excel, other commercial off the shelf applications and utilities; and custom software as may be required to ensure that daily fuel operations are conducted in an effective and efficient manner.

C-1.9.2.3.1 Qualifications: Dispatchers shall be skilled in the use of the DESC Fuels Automated System (FAS). Those skills shall include the use of the real time dispatch system, the manipulation data within the Fuel Manager system and the related fuel management modules and status board systems. The dispatcher shall be capability to analyzing hardware/software related problems to maintain accurate input flow, data retrieval, and output validity and/or capable of effectively communicating with remote systems support personnel to resolve computer related problems. In addition, dispatchers shall be knowledgeable of radio communications, instructions/regulations pertaining to fueling and defueling of Government and civilian aircraft, and Government forms used to document aircraft fuel servicing. He/she must demonstrate familiarity with the layout of the base and outlying fields as well as the airfield and aircraft parking areas and restrictions applicable to servicing aircraft within those areas. Individuals acting as dispatchers, shall be capable of to communicate in English, both orally and in writing. **For the hours depicted as Service Station Operations in Table 1, Hours of Operation, dispatchers shall not be assigned collateral duties or removed from the dispatch desk. Outside those hours, dispatcher may be tasked to perform other fuel related duties as workload dictates.**

C-1.9.2.3.2 Fuels Automated System (FAS): The incumbent Contractor and successor for a new contract period actively using FAS shall continue to provide FAS qualified dispatch personnel for the new contract period. New/first time Contractors shall arrange with the Naval Petroleum Office, Code RMB, to have dispatch personnel FAS trained and certified prior to the beginning of the contract start date. Initial FAS training of in place contract dispatch personnel and new contractor personnel will be provided by the Government. Once initial (Government) training of contract personnel has been provided, the Contractor shall be responsible for the continued training of dispatch personnel within the contract organization. Additional DESC funded training of contract personnel may be made available on submission of justification to NOLSC DC attention of the Navy FAS representative.

C-1.9.2.3.4 FAS FCC and FES Security: See [Section C-2.16, Security](#), regarding access to Government computer systems.

C-1.9.2.3.4 Facilities Response Plan (FRP): Duty dispatchers shall also be knowledgeable of emergency notification procedures and serve as the Fuel Management initial point of contact in response to fuel spills within, caused by, or relevant to operations that are the responsibility of the Fuel Department.

C-1.9.2.4 Driver/System Operator (D/SO): Driver/system operators shall be qualified to perform fuel servicing operations (refuel/defuel operations) by mobile fuel servicing equipment/trucks and fixed direct fuel servicing systems (hydrants). Driver/system operators shall pass a Contractor administered base and flightline familiarization test, practical equipment/facility competency tests, and shall be certified, by the Contractor, as qualified and the individuals training records updated prior to the unsupervised operation of any fuel servicing equipment. The Contractor shall re-certify personnel annually or as requested by the COR. Operators shall be familiar with safety regulations applicable to aviation and ground fuel servicing operations on and around the airfield and supported activities and shall demonstrate a practical knowledge of and ability to inspection and maintain fuel servicing equipment and systems. Drivers/system operators may be required to make basic input to the Fuels Automated System (FAS) or maintain dispatch logs.

Note

Per Section C-3.1.3.7, Defueling, all refuelers shall be configured to defuel. One of the provided refuelers shall serve as a dedicated defueler.

C-2.2.2.3.1.1 Off Station Operations: Should they be required, aviation fuel deliveries over public roads to off station locations shall be accomplished using equipment that is configured and licensed/permited for use on public roads. All GOG, Federal and local inspections, licensing or permits, and insurance requirements for the equipment used, shall be a responsibility of the Contractor. Operators shall be licensed as set forth in [Section C-1.9.2.4.1, Licensing](#).

C-2.2.2.3.2 Direct Fuel Servicing Equipment: Government furnished equipment consisting of the tankage defined as bulk storage and direct refueling system as described in [Appendix A, Government Furnished Facilities](#), shall be inspect, maintained to the extent outlined in [Section C-2.11, Property Management and Maintenance](#), and operated by the Contractor. Equipment/system inspections and product sampling/testing, i.e., periodic Type "C" product analysis, shall be completed and documented on the system inspection forms prior to the initial use of the equipment for the duty day.

C-2.2.2.3.3 Jet Fuel Services Data: The data reflected by [Exhibit of Products Issued](#), is historical for NSA Souda Bay. It provides detailed information in terms of months and years of fuel services. Other workload exhibits provide average workload data in terms of truck movements and pit services applicable NSA Souda Bay. [Table 2, Squadrons and Aircraft Assigned](#), have been modified to show the types of aircraft that transit and deploy to NSA Souda Bay. The Contractor shall keep this table current.

Table 1 Squadrons and Aircraft ⁽¹⁾

Squadron/Unit ⁽¹⁾	Type Aircraft ⁽¹⁾	Number Assigned ⁽¹⁾	Max. Fuel Load ⁽²⁾	Average Refuel ⁽³⁾
VQ2/VP-8	P-3	6	9450	3451
NAS Sigonella	C26	1	500	250
Various	C2	1	1824	1500
163 ARW	KC-135R	6	29000	15000

- (1) Data extracted from FAS Database. Note that there are no aircraft assigned to NSA Souda Bay. The aircraft types and numbers of are those units that deploy to and/or commonly operate from NSA Souda Bay.
- (2) See Military Handbook 844 (AS) or airframe specific NATOPS manuals
- (3) Based on historical data, the average quantity of product issued in a single refueling on a day-to-day basis

➤ **Requirement:** Respond to requests for aircraft, equipment, and facility fuel services so as to provide quality product in a timely manner to authorized customers. Tasked personnel and equipment meet the demand for services within the established response times. Receive and review documentation for legibility and accuracy, maintains control of all documentation, prepare reports and FAS summaries relevant to the Fuel Management workload, and submits a complete documentation package to the fuel accounting office in a timely manner. The Contractor shall notify the Government of any circumstance that may result in the inability to perform the required services in a timely manner.

➤ **Performance Standards**

- ✓ Mobile/fixed equipment inspected and sampled by prior to first use of the duty day. Inspection and applicable laboratory documents available
- ✓ Response to requests for fuel services within the established perimeters. No servicing delays the result of Contractor negligence or misconduct
- ✓ Driver’s knowledgeable of and use appropriate radio etiquette
- ✓ Operators adhere to operational safety rules, i.e., flightline vehicle operations, grounding and bonding, safety distance criteria, fire watch, and other safety guidelines
- ✓ Issues/defuel/truck fill documents one hundred percent accurate. Documents complete and legible
- ✓ No fuel spills due to Contractor negligence or misconduct

C-2.3 Bulk Storage Operations

C-2.3.1 General: Bulk storage operations are defined as the receipt, storage and handling, and issue of fuel products at the primary fuel storage facility. It also provides for of quality surveillance, system maintenance, and product accounting functions, the details of which are covered under other sections of this PWS. The Contractor shall be responsible for performing bulk fuel operations, i.e., gauging, system inspections and preventive maintenance, sampling, system alignment, documentation of tasks and actions taken, and system monitoring required and necessary to conduct all storage related actions and safeguarding fuel supplies under its control during normal and adverse conditions.

- ✓ Receipt, correlation, and periodic (FSII, Flash Point, and sulfides) samples taken and submitted for testing in accordance with MIL-STD-3004, NAVAIR 00-80T-109, Federal Specifications, and local directives
- ✓ Current references materials available (net access to or copies on hand)
- ✓ Spares and supplies that the Contractor is responsible for providing readily available
- ✓ No fuel spills the result of Contractor negligence or misconduct
- ✓ No operational delays the result of Contractor negligence or misconduct

C-2.3.4 Bulk Product Issues

C-2.3.4.1 Bulk Output: Jet fuel is issued by the five (5) outlet direct refueling system and transferred to refuelers via the jet fuel fillstand, Facility 77. For the hours established for aircraft fuel services or other services as may be outlined in [Table 1, Hours of Operation](#), tankage shall be kept in the ready-to-pump (issue) mode to supply product to the refueler fillstand system on demand. Except for scheduled maintenance and other occurrences of which the fuel dispatch center has been notified, the Contractor shall maintain tank and fillstand systems in a ready-to-issue mode and issue products on demand.

C-2.3.4.1.1 Issues to Refuelers: For the purpose of local/contractor refueler top-offs, the jet fuel fillstand is a driver-operated, supply on demand or self-service system. Documentation relevant to refueler top-offs and the disposition of those documents shall be compiled and controlled in accordance with local instructions.

C-2.3.4.1.1 Issues via the Direct Refueling System: System operators set the various tanks and components in the ready to issue mode and as outlined in [Section C.2.2.2, Aviation Fuel Servicing Operations](#), operate the direct refueling system to service aircraft. Documentation relevant to the servicing of aircraft via the direct refueling system shall be compiled and controlled in accordance with local instructions.

C-2.3.4.2 Bulk Output Summary: The [Exhibit of Product Issued](#) provides historical data regarding bulk storage output in term of issues to refuelers and issues via the hydrant system.

- **Requirement:** Maintain and operate bulk storage facilities so as to receive, handle, and dispense quality products to authorized customers on demand. The Contractor shall institute security, quality, and inventory programs to ensure the issue of (maintain a tank system in the ready-to-issue mode) products without causing operational delays. The Contractor shall notify the COR of any discrepancy or issue that may result in the inability to **provide services**.
- **Performance Standards:**
 - ✓ All products issued shall be on specification
 - ✓ No fuel spills due to Contractor negligence or misconduct
 - ✓ No more than 0.5% variance tolerance as defined in Appendix D
 - ✓ Immediate communication with the fuel dispatch center and COR regarding occurrences that may result in direct fueling system delays

C-2.4 Service Station Operations

C-2.4.1 General. Service station operations, the dispensing of ground products from a fixed facility/system to authorized customers, are conducted at the new service station adjacent to the NATO Pumphouse GRU4. The service station, an automated product storage and dispensing system that also serves as the bulk ground fuel storage facility, shall be inspected, preventive/operator maintenance performed, products inventoried, system data collected, documented, and forwarded to fuels accounting, and the station readied for continued customer service for the days and hours reflected in [Table 1, Hours of Operation](#). The Contractor shall be responsible for providing the qualified personnel to perform the aforementioned tasks and duties as further defined within this section.

C-3.0 CONTRACTOR-FURNISHED EQUIPMENT

C-3.1 Vehicles

C-3.1.1 General: The Contractor shall ensure that all the vehicles, equipment, tools, supplies and services specified, required and necessary for the normal and continuous safe operation, maintenance, and inspection, calibration and upkeep of the equipment identified within this section are provided and available. The Contractor shall provide all tools, equipment, instruments, devices, parts, and supplies directly or indirectly called for within this contract or references cited. The Contractor shall provide all of the vehicles required and necessary to meet the workloads identified herein within the response times outlined in [Section C-2.2.2.2, Response](#), for the petroleum related operations specified in [Table 1, Hours of Operation](#). All equipment shall be maintained in a fully serviceable condition by the Contractor and shall be fully capable of safely performing the tasks for which they are designed. The vehicles provided to an activity at contract start shall not be replaced or removed from the base/station without written notification to and documented approval by the Government. Standby or spare vehicles not specified or required herein but presented for use on station shall pass all inspections applicable to the equivalent type of equipment provided under this contract.

C-3.1.2 Prime Mover, Trucks and Tractors

C-3.1.2.1 General: Truck and tractor chassis, to include motor tank vehicle chassis, provided under this contract shall be of the size, capacity, and condition that provides for an ease of operations fully intended by the truck manufacture, the complete safety of the driver/operator, and one that reflects the pride and professionalism of the Contractor. Truck and tractor chassis shall be of a standard, first class commercial design fully equipped and sized to tow/carry the cargo load to which they will be subjected. Subject to the minimum cargo tank capacity set forth in [Section C-3.1.3.2.1, Cargo Tank Capacity](#), the Contractor shall provide equipment that, when filled to capacity, will support the loads being carried. Tractors under 8,000-gallon refuelers shall be configured with three (3) axles rated at 12/20/20 thousand pounds or greater front to rear. 5,000-gallon motor tank trucks shall be configured with three (3) axles rated at 14/20/20 thousand pounds or greater front to rear. Single and dual product 2,000-gallon motor tank trucks used for the transport of ground fuels, aviation gasoline, used oils, and recyclable fuels shall be configured with two (2) axles rated at 10/19 thousand pounds or greater front to rear. Equipment providers shall comply with the most current version of [Federal Standard 794*](#); [Truck and Truck Tractor, Medium Commercial](#) for two (2) axle, 2,000-gallon motor tank trucks and [Federal Standard 807*](#); [Truck and Truck Tractor, Heavy Commercial](#) for three (3) axle 5,000 and 8,000-gallon trucks; however, alternative engine specifications [215 horsepower rated engines for three (3) axle vehicles and 175 horsepower rated engines for two (2) axle vehicles] and alternative transmission specifications [manual versus automatic] are expectable. As outlined in the aforementioned standards, vehicle ratings shall be the manufacture's published ratings. Component and vehicular ratings shall not be raised to meet the requirements of this or any other specification. Except as specifically modified herein, each truck/tractor shall be configured and maintained to meet the requirements set forth in [49 CFR, Chap III, Sub-Chap B, Part 393, Parts and Accessories Necessary for Safe Operation](#). All tractors of the same class shall be interchangeable with all trailers of the same class without modification to the tractor or trailer.

C-3.1.2.2 Safety/Environmental: The Contractor shall maintain trucks so that entry of carbon monoxide and noxious fumes into the vehicle cab is minimized. Boots around pedals and levers shall be in tact and tight fitting. Grommets in holes through the firewall shall fit snugly. Holes in the floor panels, firewall, or elsewhere within the cab shall be repaired. Heater and fresh air intakes shall be remote from the exhaust discharge. Exhaust systems shall be inspected and repaired or replaced as necessary. Engine oil/fluids shall be controlled (leaks repaired) so as to prevent the spillage of fluids anywhere.

C-3.1.2.3 Radios: See [Section C-3.3.1.1, Radios](#), regarding communications equipment; however, all Contractor provided vehicles shall be equipped with devices designed to minimize radio interference.

C-3.1.2.4 Electrical Wiring and Lights: All wiring beyond the rear of the truck or tractor cab shall be of adequate size to provide the required current-carrying capacity and mechanical strength. It shall be mounted to provide protection from physical damage and contact with spilled fuel by being enclosed in a metal conduit or other oil-resistant protective covering. All circuits shall have over-current protection. Junction boxes shall be weatherproof.

C-3.1.2.5 Mirrors and Glass: All trucks and tractors shall be equipped with large, truck type exterior rear view mirrors located and mounted so as to provide the driver a clear view of the rear along both sides of the vehicle or trailer. Mirrors as well as windshields, windows, turn signals, reflectors, clearance and brake lights shall not be cracked, broken, fogged, or distorted in a way that would impede the driver's vision or prevent a clear signal to other traffic.

C-3.1.2.6 Fenders and Mudguards: Fenders and mudguards shall be installed over the wheels of the tractor to fully protect the cargo tank and pumping system. Front fenders/mudguards may be tractor or trailer mounted. Non-functional skirting and flashing is prohibited.

C-3.1.2.7 Tires: Unless specific tire requirements are established by the Commanding Officer, *49 CFR, Chap III, Sub-Chap B, Part 393, Sub-Part G* applies. However, non-FOD tire may be mounted at the Contractors discretion.

C-3.1.2.8 Exhaust: The exhaust system of all trucks/tractors shall consist of a standard commercial muffler and a spark arrestor. The spark arrestor shall be approved under *USDA Forest Service Standard 5100.1b as supplemented by the NWCG Spark Arrestor Guide, General Purpose and Locomotive (GP/Loco), Volume I*. The spark arrestor shall have a clean out plug. Where flexible exhaust pipe is used to absorb engine torque, a short section, not exceed 18 inches may be used. Exhaust systems shall be configured as follows:

NOTE

A spark arrestor is not required on trucks equipped with turbo diesel engines where 100 percent of the exhaust passes through the turbo unit.

C-3.1.2.8.1 Forward Mounted Fuel Components: On fuel servicing tractor/semi-trailers where fuel system components and piping are mounted on the tractor chassis or on the front of the tank over the tractor chassis, and on cargo tank motor vehicles where components are mounted on the chassis between the cab and the tank or along the chassis under the tank behind the cab, the muffler and spark arrestor shall be mounted at the front of the engine with the exhaust outlet directed toward and exiting at the right extreme of the front bumper of the unit. The exhaust outlet shall point toward the ground at a 45-degree angle and terminate no higher than 18 inches above the ground.

C-3.1.2.8.2 Under-Trailer/Rear Mount Fuel Components: On fuel servicing equipment configured with the system components and piping mounted under the trailer and to the rear of the landing gear or on the rear of the trailer, a shielded commercial exhaust system as described in *NFPA 407, Standards for Aircraft Fuel Servicing*, may be installed. Exhaust piping, shielded or otherwise, shall not terminal under the truck/tractor cab or anywhere between the chassis frame rails.

C-3.1.2.9 Painting and Marking: Contractor vehicles, excluding utility vehicles, shall be painted/marked in accordance with *NAVFAC P-300, Management of Transportation Equipment*. All shall be free of rusted areas, flaking paint, and excessive paint oxidation. Contractor vehicles shall be completely repainted when touch up painting exceeds 20 percent of the vehicle's surface. Faded, poorly reflective, and obscure stencils, placards, and logos shall be replaced.

C-3.1.2.9.1 Placards: A DOT placard applicable to the grade of product being transported shall be placed on the left quarter of the front bumper. A placard holder or rigid plate to which the placard is mounted may be used for the bumper mounting. See sections applicable to the cargo tank for side and rear placard requirements.

C-3.1.2.9.2 Company Logo: Truck/tractor doors shall be marked with a permanently affixed company name or logo. The name or logo shall be applied in a professional manner, reflective of company pride and professionalism. Stenciled or spray painted logos or magnetic placards shall not be used.

C-3.1.2.10 Spill Remediation Kits: Each Contractor truck/tractor shall be equipped with a 10-gallon spill clean up/remediation kit that is protected from the elements but readily available to the vehicle operator.

C-3.1.2.11 Equipment Controls: Except to operate the clutch, set the transmission in the appropriate gear, and engage the PTO, all pump system controls and effort necessary to observe or operate those controls and the pumping system shall be from the operator position outside the cab of the vehicle. Once the unit is set to operate, the drive shall not be required to enter the truck cab except in an emergency or to disengage the PTO and move the equipment from the area.

C-3.1.2.12 Spot Light: Each prime mover shall be equipped with a cab-mounted spotlight that can be manipulated by the driver from within the truck cab.

C-3.1.3.19 Static Bonding Cables: A static bonding cable shall be installed on a rewind reel with cable guide. The overall length of the static bonding cable shall be 50 feet or the length of the longest hose being used whichever is greater. The cable shall be of stranded steel (galvanized or stainless) wire rope 3/32-inch in diameter coated with a petroleum-resistant plastic containing light sensitive dye. The cable shall terminate with a heavy-duty clip conforming to MIL-C-83413/7B and plug, MIL-C-83413/4. Refuelers designated to “hot refuel” shall be equipped with two cable/reel assemblies.

C-3.1.3.20 Electrical Wiring and Lights: See [Section C-3.1.2.4, Electrical Wiring and Lights](#).

C-3.1.3.21 Fire Extinguishers: Each refueler shall be equipped with at least two fire extinguishers, one on the left (drivers) side readily accessible to the operator at the refueler control panel, the other on the right rear of the unit. Each extinguisher shall have an ANSI rating of not less than 20-B. Halogen extinguishers shall not be used.

C-3.1.3.22 Fenders and Mudguards: Fenders/ mudguards shall be installed over the wheels of the trailer to fully protect the cargo tank, hoses, and other equipment. Nonfunctional skirting and flashing are prohibited.

C-3.1.3.23 Tires: See [Section C-3.1.2.7, Tires](#).

C-3.1.3.24 Painting and Marking: See [Section C-3.1.2.9, Painting and Marking](#), regarding the painting and markings of cargo tanks.

C-3.1.3.24.1 Alignment of Stencils: Reflective stencils as outlined in [NAVFAC P-300, Management of Transportation Equipment](#), shall be applied and positioned in a precise manner. Cargo tank side stencils shall read left to right and be proportionally placed along the horizontal centerline of the cargo tank beginning 12 inches from the front bulkhead/tank weld and ending 12 inches from the rear bulkhead/tank weld. Two line stencils, i.e., NO SMOKING over WITHIN 50 FEET, shall be centered vertically on the horizontal tank centerline. Rear tank stencils reading from top to bottom shall be centered on the vertical tank centerline.

C-3.1.3.24.2 DOT Placards: DOT placards shall be placed on each side of the tank centered on and one inch below the **FLAMMABLE** stencils. A placard shall also be centered (considering lighting placement) on the right half of the rear bumper. A placard holder or a rigid plate shall be used for the bumper mounted placard versus wrapping the placard over/under or around the bumper.

C-3.1.4 Defueler

C-3.1.4.1 General: A defueler configured solely of a tank and pump system is not required under this contract. A refueler as configured above shall be provided and maintained as a defueler. As outline in Section C-3.1.3.7, Defueling, all refuelers shall be configured to defuel.

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C-3.1.5 Ground Fuel Delivery Trucks

C-3.1.5.1 General: The Contractor shall provide ground fuel delivery trucks (single or multiple compartment tank trucks capable of issuing and defueling ground fuels). Design and construction of new ground fuel trucks shall be such that the cargo tank meets DOT 406 specifications; however, cargo tanks built to MC 306 specifications are acceptable. Components shall be applied in accordance with [NFPA 385, Standard for Tank Vehicles for Flammable and Combustible Liquids](#), specifications. Should a conflict between specifications arise, the more stringent requirement shall apply. Except as modified by the following, [Section C-3.1.3, Refuelers](#), in its entirety applies. Components not specifically addressed do not apply. Loading on any axle or set of axles shall not exceed the manufacturer's gross vehicle working rate (GVWR)/limitations. Vehicle [trailer] rating shall be manufacturers published ratings. Component and vehicular ratings shall no be raised to meet the requirements of this specification, see [Federal Standard 794U; Truck and Truck Tractor: Medium Commercial](#).

C-3.1.5.2 Cargo Tank(s): See [Section C-3.1.3.2](#) and sub-sections thereto. Baffle openings (top vent/bottom flow) may be sized to 100 GPM. The cargo tank(s) may be dual product having a **minimum capacity of 1,000 (MUP) and 1,000 gallons (F76)** plus the appropriate expansion space, or single product tank trucks of equal or greater capacity. See [NFPA 385, Standard for Tank Vehicles for Flammable and Combustible Liquids](#) regarding dual product tank separation. Unless specified otherwise, all cargo tanks shall normally be filled to capacity.

C-3.1.5.3 Tank Venting: See [Section C-3.1.3.3, Tank Venting](#); however, the venting capacity for this small unit may be reduced to 100 GPM.

C-3.1.5.4 Overfill Protection: See [Section C-3.1.3.4, Overfill Protection](#).

C-3.1.5.5 Low Point Drain(s): See [Section C-3.1.3.5, Low Point Drain](#).

C-3.1.5.6 Piping: See [Section C-3.1.3.6, Piping](#). For ground fuel trucks, system piping may be configured so that product is drawn from (issue) and returned to (fill or defuel) a common point/valve.

C-3.1.5.6.1 Bottom Loading Connection(s): Ground fuel delivery trucks shall be equipped/configured for bottom loading at a minimum of 100 GPM. The type bottom-loading adapter will be determined by the grade or class of products to be loaded. Jet fuels used in lieu of diesel fuel shall be loaded through a two and one-half inch (2 1/2") single point pressure fuel-servicing adapter. Diesel fuel and gasoline shall be loaded through a [dry-break disconnect adapter](#) assembly (OPW CIVACON KAMVALOK® for example); two inch (2") for diesel fuel and one and one-half inch (1 1/2") for gasoline. Dust caps shall be provided for all systems.

Note

Conversion of the ground fuel facilities issue hoses/couplers will be undertaken by the government on or prior to the start of the contact.

Note

At those locations applicable, vapor recovery systems shall be installed on units/systems designated to handle automotive gasoline (all grades).

Note

NFPA 385-90, Section 6-2.12, and all reference to "top-loading" of ground fuel trucks shall be disregarded. Only bottom loading of fuel trucks is authorized.