



ROCKY BASIN

Ch. 20 Supplement Equipment Specification Guide



INTENT: This document is intended to provide the field with the necessary information for establishing Incident Only EERAs. It will also serve as a tool for Ground Support and Inspectors on what is required to be with equipment.

CLERICAL SUPPORT UNIT

Provide 24-hour office services capable of producing 400 copies of 40 pages, twice per day in three hours or less and basic word processing capability. Units shall be self contained, with adequate supplies for at least 7 days, contain 36" format plotter capability, and be climate controlled. For all other services the delivery date and time will be negotiated on a case-by-case basis between the vendor and the appropriate Incident Management Team personnel.

EQUIPMENT REQUIREMENTS

Equipment (Clerical Support unit and transportation vehicle(s)) shall meet all standards established by this specification or incorporated by reference and shall be maintained in good repair by the Contractor.

Minimum Equipment Requirements

1. AC power source (generator) that is adequate to provide sufficient power for all onboard systems (with a decibel rating no greater than 68 at 50 feet).
2. All necessary fuel and power (The Contractor is authorized to purchase fuel from the fuel vendor if provided at the incident, fuel vendors will be required to accept credit cards).
3. Uninterruptable Power Supply (UPS) and line conditioner system.
4. Unit must meet Occupational Safety and Health Administration (OSHA) work environment requirements.
5. Wheel Chocks: Two (2) sets minimum, one set for each side of trailer (or unit).
6. Trailer stabilizer.
7. Awning: The awning is optional but if one is provided it shall be a workable standard trailer awning, minimum 14' length.

8. Windows: Windows are optional but if they are provided a minimum of two (2), 30" W x 26" H for natural lighting and air flow, (one in each work area).
9. Internal Lighting: Sufficient to provide adequate light for night time operations. In addition, all lighting for individual workstations can either be wall mounted or ceiling mounted as long as it produces a light level of 50 average maintained foot-candles at the working surface. This shall be maintained throughout the working space.
10. Outside Lighting: Sufficient to provide light all entrance ways (two way directional security light).
11. Steps: If needed, to provide safe entry/exit from the trailer or unit.
12. All printers and plotters shall be networked with all network cables and power strips supplied.
13. Daily backup capability or redundancy needed of all data and products.
14. DVD/CD RW writer on each workstation.
15. Photocopiers (3):
 - a. Capable of producing 400 copies of 40 pages twice per day in 3 hours.
 - b. Capable of producing booklet Incident Action Plan (IAP) (5½" Wide X 8½" Tall)
 - c. Capable of duplex printing.
 - d. Capable of printing 200 copies of 30 pages of 11" x 17" map packets in 3 hours
 - e. Collating and stapling capability
 - f. Metered to document copy count
16. Printer, Capable of color printing and up to 11" x 17"
17. Plotter:
 - a. 36" format.
 - b. Non-GIS ready (HP Design Jet 1050 or better).
18. FAX Machine, Stationary:
 - a. Laser type, heavy duty, capable of 100 page memory
 - b. Capable of sending group fax to multiple numbers (12 or more)
19. Telephone capabilities (communication lines will be provided by the government and are for government work only)
 - a. Pre-wired for telephone use.
 - b. Minimum (4) line capable.
 - c. A single hook-up box shall be on the exterior of the Unit
20. Workstation with Computers (2):
 - a. 60 GB available for use
 - b. Compact Disc Read-Write drive
 - c. External Hard Drive
 - d. DVD- Read-Write Drive

- e. Minimum of one available Universal Serial Bus (USB) Port, with an available 4-port USB Hub
 - f. Microsoft Office Professional software
 - g. Operating System: Windows XP S3 or better
 - h. Current Anti-Virus software installed
21. Scanner, Color Flat Bed: ability to scan documents with automatic document feed capability
 22. Staplers, Heavy/Light Duty
 23. Hole Punch, Heavy Duty, 3-hole
 24. Paper Cutter, 18"
 25. Paper Shredder: ability to shred up to 12 sheets per pass into 7/32 strips up to 130 sheets per minute
 26. Comb binding capability
 27. Laminator 8 ½" x 11" or bigger
 28. Adequate supplies for one week deployment. Vendor shall have adequate source to resupply materials.
 29. White paper, no minimum but vendor is required to have enough to meet the needs specified in 15a. above (400 copies of 40 pages, twice per day in three hours or less).
 30. Color paper, (8 ½" x 11" and 11" x 17"), four (4) colors, one (1) ream each.
 31. All paper shall be a minimum of 30% recycled content.

Optional Item: Internet Capability to establish a minimum level of service for satellite internet access and is for government use only)

1. Minimum bandwidth: 1.5Meg/s Download speed, 512kbps Upload speed
2. Dynamic IP addressing with port address translating or static ip addressing must allow at least 40 internal concurrent host accesses.
3. The ability to support for 3DES IPsec tunneling is required to support end to end solutions where remote access is needed.
4. Minimum Hardware: WI-FI Access Points: 802.11 A/B/G compatible with WEP key encryption options.
5. Browser administrated
6. Power over Ethernet capable.
7. POE 8 port data switch.

Incident Related Data: All data used on the incident, and products produced, will be under the direction of the Planning Section Chief. No product or data shall be removed from the incident. Some data is sensitive in nature and shall be removed from all systems prior to demobilization.

Mobilization and Demobilization: Mobilization and demobilization rate should include all mobilization and demobilization expenses.

All transportation vehicles shall be in sound mechanical condition with sufficient horsepower and mainframe configurations to ensure successful performance on roads and highways. All vehicles under this Agreement shall be able to be legally driven on highways under their own power and be able to travel at a minimum of 50 miles an hour.

Biobased Products: This procurement requires the use of biobased products to the extent that such products are reasonably available, meet agency or relevant industry performance standards, and are reasonably priced. Where available, these products should first be acquired from among qualified products that fall under the umbrella of items designated through the Federal Biobased Products Preferred Procurement Program (FB4P). Information is available at: <http://www.biopreferred.gov/>

Prohibited Marking: Federal regulations prohibit the use of official agency shields or markings on private vehicles or property.

Training/Experience: Personnel shall be skilled in the use of Microsoft Office, and capable of performing basic word processing functions. The government reserves the right to verify training at any time for all operators.

PAYMENT

Payment will be made for the daily rate and price per copy.

- i. Daily Rate - Payment will be made on basis of calendar days (0001 - 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.
- ii. Work Rate
 - 1) Copy - Payment will be made for actual quantity of pages copied as ordered by the government.
 - 2) Lineal Feet (LF) - Payment will be made for actual quantity of lineal feet plotted as ordered by the government.
 - 3) Each - Payment will be made for the actual quantity of pages laminated or faxed; or books bound as ordered by the government.
 - 4) Square Feet (SF) - Payment will be made for actual quantity of square feet of custom sized lamination (other than 8½" x 11" or 11" x 17") as ordered by the government.

DOZER/TRACTOR PLOWS

The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, trained/certified personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Equipment shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

Equipment Typing

Dozer

- Type 3 - Min. 50 HP - 99 HP
- Type 2 - Min. 100 HP - 199 HP
- Type 1 - Min. 200 HP - 320 HP

Tractor Plows

- Type 3 - Min. 50 HP - 99 HP
- Type 2 - Min. 100 HP - 199 HP

Equipment Requirements

1. An audible reverse warning device (backup alarm) of 87 decibel or greater measured at 5 feet behind and in the center of the equipment.
2. A fire extinguisher, multi-purpose 2A 10BC that is securely mounted to the vehicle and accessible by the operator. The fire extinguisher shall have a current annual inspection tag and the annual maintenance tag in regards to a 6 year annual inspection and every 12 years regarding a hydro test on all dry powder, metal fire extinguishers.
3. Shovel
4. US Forest Service-qualified spark arrester on all naturally aspirated engines
5. All factory guards shall be in place and in functional condition (i.e. engine compartment) (applicable for heavy equipment)
6. Radiator protection (applicable for heavy equipment)
7. Seat belts
8. Flashlight
9. Water, 1 gal drinking
10. 5-person first aid kit
11. Personal Protective Equipment. Contractor shall be responsible for ensuring all personnel arrive at the incident with the proper Personal Protective Clothing and

Equipment as prescribed in the agreement. Contractor shall be responsible for ensuring the Personal Protective Equipment is operable and maintained in good repair throughout the duration of any assignment. Personal Protective Clothing will be maintained in good repair, and be cleaned at sufficient intervals to preclude unsafe working conditions. All personnel shall be wearing Personal Protective Clothing, including boots, upon arrival at the incident.

Contractor shall be responsible for ensuring that all personnel arrive with the following:

Personal Protective Equipment (PPE)

- (1) BOOTS: All Leather uppers, lace-up type, minimum of 8 inches high with lug type sole in good condition (steel toed boots are not recommended).
- (2) HARD HAT: Hardhat meeting NFPA Standard 1977 is required.
- (3) GLOVES: One pair of heavy-duty leather per person.
- (4) EYE PROTECTION: One pair (meets standards ANSI Z87, latest edition).
- (5) HEARING PROTECTION: Use hearing protection whenever sound levels exceed 85 dB. Earphones (headset) required with radio shall have built-in hearing protection.
- (6) HEAD LAMP: With batteries and attachment for hardhat.

NOTE: It is recommended that fireline personnel wear a short-sleeved t-shirt, underwear, and socks under fire clothing and boots. T-shirts and underwear should be 100% cotton or a 100% flame resistant blend of fibers. Socks should be cotton, wool, or a blend of flame resistant fibers.

Training/Experience

1. RT-130 Annual Fireline Refresher including fire shelter.
2. Commercial Drivers License (for transports, when required).
3. All operators shall be able to operate the equipment safely up to the manufacturer's limitations (i.e., experience working in steep terrain, timber, etc.)

Additional Requirements for Dozers

1. Rollover Protective Structure (ROPS) meeting ISO 3471, ISO 8082, or SAE J 1040 is required on all machines. A manufacturer's nameplate certifying the operator enclosure or alternative documentation that the cab meets these provisions is required. Modification of factory ROPS/FOPS (Cutting/Welding) and any

- aftermarket ROPS/FOPS requires certification to ISO 3471, ISO 8082, or SAE J 1040.
2. Operator Protection. Shall meet all applicable Federal and State (the State where equipment is registered) logging safety standards (per OSHA, 29 CFR 1910.266) and must have operator protection, such as a Forestry cab package with wire mesh or safety glazing that provides equivalent protection. Stand-alone safety glass does not provide equivalent protection to wire mesh, however it may be used as part of the window glazing system. Polycarbonate windows are not "glass" and may be acceptable as a stand-alone window guard. Any machine cab meeting ISO 8084 or SAE 1084 fulfills this requirement. The protective canopy shall be constructed to protect the operator from injury due to falling trees, limbs, saplings or branches which might enter the compartment side areas and from snapping winch lines or other objects. The rear portion of the cab shall be fully enclosed with open mesh material with openings of such size as to reject the entrance of an object larger than 2 inches in diameter. The covering shall be affixed to the structural members so that ample clearance will be provided between the screen and the back of the operator and shall provide maximum rearward visibility. Open mesh shall be extended forward as far as possible from the rear corners of the cab sides to provide the maximum protection against obstacles, branches, etc., entering the cab area. Deflectors, which may be part of the cab, shall be installed in front of the operator area to deflect whipping saplings and branches. Deflectors shall be located so as not to impede visibility and access to the cab.
 3. Lighting (2 rear, 2 forward). Lights shall be mounted to the equipment in such a way to provide protection from damage and provide illumination beyond the blade.
 4. Underbody protection (belly pan, rock guards unless not recommended by manufacturer)
 5. Cable blades ARE NOT ACCEPTABLE. See D.23, Exhibit A for definition.
 6. Winch Minimum Standards. (If equipped)
 - a. 50-100 HP - Minimum 30,000 lb. with a minimum of 5/8" cable
 - b. 101-139 HP - Minimum 50,000 lb. with a minimum of 3/4" cable
 - c. 140-179 HP - Minimum 60,000 lb. with a minimum of 7/8" cable
 - d. 180-320 HP - Minimum 80,000 lb. with a minimum of 1" cable

Additional Requirements for Tractor/Plows:

1. Rollover Protective Structure (ROPS) meeting ISO 3471, ISO 8082, or SAE J 1040 is required on all machines. A manufacturer's nameplate certifying the operator enclosure or alternative documentation that the cab meets these provisions is required. Modification of factory ROPS/FOPS (Cutting/Welding) and any aftermarket ROPS/FOPS requires certification to ISO 3471, ISO 8082, or SAEJ 1040.
2. Operator Protection. Shall meet all applicable Federal and State (the State where equipment is registered) logging safety standards (per OSHA, 29 CFR 1910.266)

and must have operator protection, such as a Forestry cab package with wire mesh or safety glazing that provides equivalent protection. Stand-alone safety glass does not provide equivalent protection to wire mesh, however it may be used as part of the window glazing system.

3. Polycarbonate windows are not "glass" and may be acceptable as a stand-alone window guard. Any machine cab meeting ISO 8084 or SAE 1084 fulfills this requirement. The protective canopy shall be constructed to protect the operator from injury due to falling trees, limbs, saplings or branches which might enter the compartment side areas and from snapping winch lines or other objects. The rear portion of the cab shall be fully enclosed with open mesh material with openings of such size as to reject the entrance of an object larger than 2 inches in diameter. The covering shall be affixed to the structural members so that ample clearance will be provided between the screen and the back of the operator and shall provide maximum rearward visibility. Open mesh shall be extended forward as far as possible from the rear corners of the cab sides to provide the maximum protection against obstacles, branches, etc., entering the cab area. Deflectors, which may be part of the cab, shall be installed in front of the operator area to deflect whipping saplings and branches. Deflectors shall be located so as not to impede visibility and access to the cab.
4. Lighting (2 rear, 4 forward). Lights shall be mounted to the equipment in such a way to provide protection from damage and provide illumination beyond the blade.
5. Underbody protection (belly pan, rock guards unless not recommended by manufacturer)
6. Drip Torch Carrier
7. Hydraulic Angle Blade
8. Plow - Minimum Standards
 - a. Plow Construction shall be compatible with Established Industry Design Principles
 - b. Plow Points and Discs shall be of sufficient size and quality to accomplish the construction of fireline under normal soil conditions
 - i. Standard Pull Behind Plow
 1. Fesco/Mathis, brand name or equivalent
 2. Minimum Plow Width wing tip to wing tip of 60"
 3. Swivel Type Drawbar Coupling
 4. Minimum Plow Depth of 12"
 5. Quick Coupling System for Hydraulic lines
 6. Hydraulic cylinder to raise and lower plow
 7. Minimum of 20 Ply Tires
 8. Plow Disc Thickness is 3/8" min. on 20" disc
 9. 3/8" inch Thick Coulter Blade
 - ii. Swing Axle Pull Behind Plow
 1. Fesco/Mathis, brand name or equivalent
 2. Minimum Plow Width wing tip to wing tip of 60"

3. Swivel Type Drawbar Coupling
 4. Minimum Plow Depth of 20"
 5. Quick Coupling System for Hydraulic lines
 6. Hydraulic cylinder to raise and lower plow
 7. Minimum of 20 Ply Tires
 8. Plow Disc Thickness is 3/8" min. on 20" disc
 9. 3/8" inch Thick Coulter Blade
- iii. Rear Tractor Mounted Plow
 1. Fesco/Mathis, brand name or equivalent
 2. Minimum Plow Width wing tip to wing tip of 60"
 3. 3/8" inch Thick Coulter Blade
 4. 1 1/4" Spring Rods
 5. Hydraulic Cylinder for Depth Control
9. Programmable Radio. A VHF-FM radio with a headset, boom microphone (mic), and push-to-talk (PTT) capability. A handheld radio shall be available. A mobile radio is acceptable as long as a handheld radio is also available. **Note: A programmable radio is only required for the Tractor Plow.**
 - a. VHF-FM Mobile Radio
 - i. VHF-FM two-way mobile radio, with a matched broadband antenna (Antenna Specialists ASPR7490, Maxrad MWB5803, or equivalent), shall be installed. The radio shall provide selection of either wideband (25.0 kHz) or narrowband (12.5 kHz) channel spacing on each channel and operate from 148 MHz to 174 MHz. The radio shall be frequency-synthesized, equipped with a CTCSS sub-audible tone encoder having a minimum of 32 selectable tones meeting the current TIA/EIA-603 standard, and develop a minimum of 30 watts nominal output power.
 - ii. Transceivers shall be set to operate in the analog narrowband mode unless local requirements dictate otherwise. All radios must have the ability to be programmed in the field by the radio operator without the aid of a computer or the services typically found in a radio shop.
 - iii. The use of appropriate VHF-FM handheld radios with suitable output power booster units is permissible. See the below VHFFM Handheld Radio section for handheld radio requirements.

Note: It is highly recommended that a programming "cheat sheet" accompany the dozer.

- b. VHF-FM Handheld Radio
 - i. A VHF-FM two-way handheld radio operating from 148 MHz to 174 MHz shall be carried by the operator. The radio shall provide selection of either wideband (25.0 kHz) or narrowband (12.5 kHz) channel spacing on each channel. The radio shall be frequency-synthesized, equipped with a CTCSS sub-audible tone encoder having a minimum of 32 selectable tones meeting the current TIA/EIA-603 standard, and

develop a minimum of 1 watt nominal output power but no more than 10 watts nominal output power. Modified radios or Family Service Radios (FRS) are not acceptable.

- ii. Transceivers shall be set to operate in the analog narrowband mode unless local requirements dictate otherwise. All radios must have the ability to be programmed in the field by the radio operator without the aid of a computer or the services typically found in a radio shop.
- iii. When the above VHF-FM Mobile Radio requirement is met with the use of a VHF-FM Handheld Radio with output power booster, that handheld VHF-FM radio may be used to comply with this section as long as the handheld radio complies with all specified VHF-FM Handheld Radio requirements. The VHF-FM handheld radio must be removable and still operate as a handheld radio.
- iv. Handheld Radio Batteries. At least two fully charged batteries per radio are required at the beginning of each shift. These contractor-provided batteries must operate the handheld radio throughout the shift. It is highly recommended that all handheld radios utilize an AA alkaline battery clamshell. A source of 115 AC power may not be locally available for rechargeable batteries.

Note: It is highly recommended that a programming "cheat sheet" accompany the handheld radio. Additionally, the handheld radio should have a carrying case or chest pack carrier.

c. Radio Headset

- i. Any radio used by an operator while the equipment is in operation shall utilize a headset with a boom mic (Field Support Services (www.helifire.com) KS-H3340 or equivalent) with PTT switch which connects to the dozer's VHF-FM radio. The headset shall not impede the safe placement and security of the dozer operator's PPE (i.e. hardhat).
- ii. The headset shall receive audio from the equipment's radio. The headset shall provide sufficient volume from the equipment's radio to be easily discernible while the equipment is in normal operation.
- iii. The headset's boom mic shall provide the equipment's radio with transmitter microphone input. Transmitted microphone audio output shall be clear and easily understandable.
- iv. The headset shall utilize a radio PTT switch that activates the equipment's radio (such as the Field Support Services (www.helifire.com) SPH-EPH-36 for B/K type radios or equivalent). The PTT switch should clip to the operators clothing.
- v. Radio Batteries: At a minimum, two batteries per radio are required. Clamshell 1.5V AA would have to be provided by the contractor to

recharge other types of batteries. Due to the explosive nature of their chemistry Lithium Ion batteries are not acceptable.

- vi. The Contractor shall comply with all National Telecommunications and Information Administration (NTIA) rules and regulations when using Federal Agency frequencies and with all Federal Communications Commission (FCC) rules and regulations when using State Agency frequencies. The Contractor shall not use the fire fighting/incident frequencies for other than fire suppression activities. All Incident, Federal and State frequencies shall be removed prior to demobilization from the incident.

Typing Matrix Table

Manufacturer Name	Equipment			Model	Horse Power	Weight	Equipment Class
Case	Dozer	Track		450C	63	11,549	T-3
Case	Dozer	Track		550	67	13,200	T-3
Case	Dozer	Track		550 LGP	67	13,400	T-3
Case	Dozer	Track		550E	67	13,438	T-3
Case	Dozer	Track		550G	67	14,138	T-3
Case	Dozer	Track		550H LGP LT	67	14,317	T-3
Case	Dozer	Track		550H WT	67	14,600	T-3
Case	Dozer	Track		550E LGP	67	14,734	T-3
Case	Dozer	Track		550G LGP	67	14,934	T-3
Case	Dozer	Track		550H LGP	67	14,960	T-3
Caterpillar	Dozer	Track		D3C Series II	70	15,159	T-3
Caterpillar	Dozer	Track		D3C III XL HYSTAT	70	16,103	T-3
Caterpillar	Dozer	Track		D3C III HYSTAT	70	16,680	T-3
Caterpillar	Dozer	Track		D3C LGP Series II	70	16,745	T-3
Caterpillar	Dozer	Track		D3C III LGP HYSTAT	70	17,004	T-3
Caterpillar	Dozer	Track		D3CS LGP Series II	70	21,663	T-3
Deere	Dozer	Track		450H	70	15,000	T-3
Deere	Dozer	Track		450G	70	15,266	T-3
Deere	Dozer	Track		450 HLT	70	15,500	T-3

Manufacturer Name	Equipment			Model	Horse Power	Weight	Equipment Class
Dresser (International)	Dozer	Track		TD7G	70	13,987	T-3
Dresser (International)	Dozer	Track		TD7H	70	15,900	T-3
Caterpillar	Dozer	Track		D3C Series III	71	15,518	T-3
Caterpillar	Dozer	Track		D3C Series III XL	71	15,941	T-3
Caterpillar	Dozer	Track		D3C Series III LGP	71	16,842	T-3
Deere	Dozer	Track		450H LGP	74	16,500	T-3
Case	Dozer	Track		650H LT	75	16,091	T-3
Case	Dozer	Track		650H WT	75	16,800	T-3
Komatsu	Dozer	Track		D31PX-21	75	17,130	T-3
Case	Dozer	Track		650E	80	15,480	T-3
Case	Dozer	Track		650	80	15,700	T-3
Case	Dozer	Track		650G	80	15,909	T-3
Caterpillar	Dozer	Track		D4C III HYSTAT	80	16,150	T-3
Caterpillar	Dozer	Track		D4C Series II	80	16,383	T-3
Caterpillar	Dozer	Track		D4C III XL HYSTAT	80	16,573	T-3
Caterpillar	Dozer	Track		D4C III LGP HYSTAT	80	17,163	T-3
Caterpillar	Dozer	Track		D4C LGP Series II	80	17,279	T-3
Deere	Dozer	Track		550G	80	16,641	T-3
Deere	Dozer	Track		550H LT	80	16,800	T-3
Dresser (International)	Dozer	Track		TD8H	80	16,764	T-3
Dresser (International)	Dozer	Track		TD8G	80	17,147	T-3
Caterpillar	Dozer	Track		D4C Series III	81	16,019	T-3
Caterpillar	Dozer	Track		D4C Series III XL	81	16,442	T-3
Caterpillar	Dozer	Track		D4C Series III LGP	81	17,032	T-3
Case	Dozer	Track		850D	82	17,158	T-3
Case	Dozer	Track		850D LGP	82	19,177	T-3
Deere	Dozer	Track		550H LGP	84	17,500	T-3

Manufacturer Name	Equipment			Model	Horse Power	Weight	Equipment Class
Komatsu	Dozer	Track		D37PX-21	85	17,130	T-3
Case	Dozer	Track		850E	89	16,800	T-3
Case	Dozer	Track		850G	89	17,100	T-3
Case	Dozer	Track		850E LGP	89	17,325	T-3
Case	Dozer	Track		850G LGP	89	18,450	T-3
Caterpillar	Dozer	Track		D5C III HYSTAT	90	18,711	T-3
Caterpillar	Dozer	Track		D5C	90	19,128	T-3
Caterpillar	Dozer	Track		D5C III XL HYSTAT	90	19,447	T-3
Caterpillar	Dozer	Track		D5C III LGP HYSTAT	90	19,780	T-3
Caterpillar	Dozer	Track		D5C LGP	90	19,800	T-3
Caterpillar	Dozer	Track		D4H LGP Series II	90	24,085	T-3
Caterpillar	Dozer	Track	Cable	D4H Series II	90	26,910	T-3
Caterpillar	Dozer	Track	Grapple	D4H Series II	90	31,400	T-3
Deere	Dozer	Track		650H LT	90	18,500	T-3
Deere	Dozer	Track		650G	90	18,760	T-3
Deere	Dozer	Track		650H LGP	90	19,100	T-3
Dresser (International)	Dozer	Track		TD9H	90	18,970	T-3
Case	Dozer	Track		850H LT	91	17,915	T-3
Case	Dozer	Track		850H WT	91	18,700	T-3
Case	Dozer	Track		850H LGP	91	19,209	T-3
Caterpillar	Dozer	Track		D5C Series III	91	18,150	T-3
Caterpillar	Dozer	Track		D5C Series III XL	91	18,600	T-3
Caterpillar	Dozer	Track		D5C Series III LGP	91	19,256	T-3
Caterpillar	Dozer	Track		D4H Series II	95	22,408	T-3
Komatsu	Dozer	Track		D39PX-21	95	19,620	T-3
Caterpillar	Dozer	Track		D3C SA	101	15,019	T-2
Caterpillar	Dozer	Track		D4H XL Series III	105	23,513	T-2

Manufacturer Name	Equipment			Model	Horse Power	Weight	Equipment Class
Caterpillar	Dozer	Track		D4H LGP Series III	105	26,739	T-2
Caterpillar	Dozer	Track	Cable	D4H Series III	105	27,010	T-2
Caterpillar	Dozer	Track	Grapple	D4H Series III	105	31,400	T-2
Caterpillar	Dozer	Track		D5M XL	110	27,006	T-2
Caterpillar	Dozer	Track		D5M LGP	110	28,800	T-2
Dresser (International)	Dozer	Track		TD12	110	24,350	T-2
Komatsu	Dozer	Track		D41P-6C	110	25,480	T-2
Case	Dozer	Track		1150E	113	24,165	T-2
Case	Dozer	Track		1150E LGP	113	26,154	T-2
Case	Dozer	Track		1150G	119	25,300	T-2
Case	Dozer	Track		1150H LT	119	25,300	T-2
Case	Dozer	Track		1150H WT	119	26,400	T-2
Case	Dozer	Track		1150H LGP	119	27,060	T-2
Case	Dozer	Track		1150G LGP	119	27,060	T-2
Caterpillar	Dozer	Track		D5H Series II	120	27,831	T-2
Caterpillar	Dozer	Track	Cable	D5H Series II	120	33,880	T-2
Caterpillar	Dozer	Track	Grapple	D5H Series II	120	38,050	T-2
Deere	Dozer	Track		750B	120	29,055	T-2
Dresser (International)	Dozer	Track		TD12C	125	28,497	T-2
Dresser (International)	Dozer	Track		TD12 LGP	125	28,586	T-2
Dresser (International)	Dozer	Track		TD12C LGP	125	32,605	T-2
Caterpillar	Dozer	Track		D5H XL Series II	130	30,830	T-2
Caterpillar	Dozer	Track		D5H LGP Series II	130	32,890	T-2
Caterpillar	Dozer	Track		D6D	140	33,011	T-2
Caterpillar	Dozer	Track		D6M XL	140	33,258	T-2
Caterpillar	Dozer	Track		D6M LGP	140	36,455	T-2
Deere	Dozer	Track		750B LGP	140	31,300	T-2

Manufacturer Name	Equipment			Model	Horse Power	Weight	Equipment Class
Deere	Dozer	Track		750C	140	31,712	T-2
Deere	Dozer	Track		750C Series II LT	140	31,712	T-2
Deere	Dozer	Track		750C LGP	140	33,324	T-2
Deere	Dozer	Track		750C Series II WT	140	33,324	T-2
Deere	Dozer	Track		750B LT	140	34,834	T-2
Deere	Dozer	Track		750C Series II LGP	140	36,576	T-2
Dresser (International)	Dozer	Track		TD15C	140	32,975	T-2
Dresser (International)	Dozer	Track		TD15C LGP	140	37,980	T-2
Dresser (International)	Dozer	Track		TD12C XP	142	32,866	T-2
Case	Dozer	Track		1550	150	27,937	T-2
Case	Dozer	Track		1550 LGP	150	30,500	T-2
Caterpillar	Dozer	Track	Cable	527CA	150	40,727	T-2
Caterpillar	Dozer	Track	Grapple	527GR	150	47,250	T-2
Caterpillar	Dozer	Track		D6E	155	33,868	T-2
Komatsu	Dozer	Track		D61PX-15	155	39,990	T-2
Timberjack	Dozer	Track	Grapple	480 BT	161	52,500	T-2
Caterpillar	Dozer	Track		D6D SA	165	29,407	T-2
Caterpillar	Dozer	Track		D6H Series II	165	39,676	T-2
Caterpillar	Dozer	Track		D6R	165	39,700	T-2
Caterpillar	Dozer	Track		D6H DS Series II	165	39,938	T-2
Caterpillar	Dozer	Track		D6R DS	165	40,100	T-2
Caterpillar	Dozer	Track		D6H LGP Series II	165	45,163	T-2
Caterpillar	Dozer	Track		D6H DS LGP Series II	165	45,415	T-2
Deere	Dozer	Track		850B	165	36,730	T-2
Deere	Dozer	Track		850B LT	165	38,601	T-2
Deere	Dozer	Track		850B LGP	165	43,549	T-2
Dresser (International)	Dozer	Track		TD15E	175	37,650	T-2

Manufacturer Name	Equipment			Model	Horse Power	Weight	Equipment Class
Dresser (International)	Dozer	Track		TD15E LGP	175	40,560	T-2
Caterpillar	Dozer	Track		D6R LGP	185	45,200	T-2
Caterpillar	Dozer	Track		D6R DS LGP	185	45,600	T-2
Deere	Dozer	Track		850C	185	40,155	T-2
Deere	Dozer	Track		850C Series II WT	185	41,070	T-2
Deere	Dozer	Track		850C Series II LT	185	41,154	T-2
Deere	Dozer	Track		850C LGP	185	42,691	T-2
Deere	Dozer	Track		850C Series II LGP	185	42,698	T-2
Caterpillar	Dozer	Track		D7G	200	44,600	T-1
Komatsu	Dozer	Track		D65XP-15	205	46,610	T-1
Caterpillar	Dozer	Track		D7H Series II	215	54,511	T-1
Caterpillar	Dozer	Track		D7H LGP Series II	215	59,176	T-1
Caterpillar	Dozer	Track		D7H DS LGP Series II	215	59,838	T-1
Dresser (International)	Dozer	Track		TD20G	225	48,700	T-1
Dresser (International)	Dozer	Track		TD20H	225	50,204	T-1
Dresser (International)	Dozer	Track		TD20H LGP	225	52,470	T-1
Dresser (International)	Dozer	Track		TD20G LGP	225	52,700	T-1
Caterpillar	Dozer	Track		D7R	230	54,200	T-1
Caterpillar	Dozer	Track		D7R DS	230	55,100	T-1
Caterpillar	Dozer	Track		D7H DS Series II	230	55,171	T-1
Caterpillar	Dozer	Track		D7R LGP	240	58,800	T-1
Caterpillar	Dozer	Track		D7R DS LGP	240	59,700	T-1
Komatsu	Dozer	Track		D85EX-15	240	61,950	T-1
Caterpillar	Dozer	Track		D8N	285	71,764	T-1
Caterpillar	Dozer	Track		D8R	305	73,875	T-1
Dresser (International)	Dozer	Track		TD25G	325	74,900	T-1
Caterpillar	Dozer	Track		D8L	335	80,999	T-1

Manufacturer Name	Equipment			Model	Horse Power	Weight	Equipment Class
Caterpillar	Dozer	Track		D9N	370	93,698	T-1

PAYMENT

- a. On-Shift includes time worked, time that resource is held or directed to be in a state of readiness, and compensable travel (resource traveling under its own power) that has a specific start and ending time.
- b. DOUBLE SHIFT equipment is staffed with two operators or crews (one per shift). There will be no compensation for a double shift unless a separate operator is ordered in writing for the second shift. Agency personnel at the Section Chief level may, by resource order, authorize a second operator if needed during the assignment. Double shifts, when ordered, will be paid at 165% of the daily rate.
- c. DAILY RATE - Payment will be made on basis of calendar days (0001 - 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.
- d. MINIMUM DAILY GUARANTEE - For each calendar day that the transport is required to remain at the incident, prior to offloading the dozer/excavator/tractor plow, the minimum daily guarantee will be paid. For any time under hire for at least 8 hours, the government will pay no less than the minimum daily guarantee, or the mileage rate, whichever is greater. If a resource is under hire for less than 8 hours during a calendar day, the amount earned for that day will not be less than one-half the minimum daily guarantee. HEAVY EQUIPMENT THAT HAS ONE OPERATOR FOR THE TRANSPORT AND THE HEAVY EQUIPMENT WILL BE PAID AT 65% OF THE RATE FOR THE TRANSPORT - MINIMUM DAILY GUARANTEE.

EXCAVATOR

The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, trained/certified personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Equipment shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

Equipment Typing

- Type 4 - 60 - 80 HP rating
- Type 3 - 81 - 110 HP rating
- Type 2 - 111 - 155 HP rating
- Type 1 - 156 + HP rating

Equipment Requirements

1. An audible reverse warning device (backup alarm) of 87 decibel or greater measured at 5 feet behind and in the center of the equipment.
2. A fire extinguisher, multi-purpose 2A 10BC that is securely mounted to the vehicle and accessible by the operator. The fire extinguisher shall have a current annual inspection tag and the annual maintenance tag in regards to a 6 year annual inspection and every 12 years regarding a hydro test on all dry powder, metal fire extinguishers.
3. Shovel
4. US Forest Service-qualified spark arrester on all naturally aspirated engines
5. All factory guards shall be in place and in functional condition (i.e. engine compartment) (applicable for heavy equipment)
6. Radiator protection (applicable for heavy equipment)
7. Seat belts
8. Flashlight
9. Water, 1 gal drinking
10. 5-person first aid kit
11. Personal Protective Equipment. Contractor shall be responsible for ensuring all personnel arrive at the incident with the proper Personal Protective Clothing and Equipment as prescribed in the agreement. Contractor shall be responsible for ensuring the Personal Protective Equipment is operable and maintained in good repair throughout the duration of any assignment. Personal Protective Clothing will be maintained in good repair, and be cleaned at sufficient intervals to preclude unsafe working conditions. All personnel shall be wearing Personal Protective Clothing, including boots, upon arrival at the incident.

Contractor shall be responsible for ensuring that all personnel arrive with the following:

Personal Protective Equipment (PPE)

- (1) **BOOTS:** All Leather uppers, lace-up type, minimum of 8 inches high with lug type sole in good condition (steel toed boots are not recommended).
- (2) **HARD HAT:** Hardhat meeting NFPA Standard 1977 is required.
- (3) **GLOVES:** One pair of heavy-duty leather per person.
- (4) **EYE PROTECTION:** One pair (meets standards ANSI Z87, latest edition).

(5) HEARING PROTECTION: Use hearing protection whenever sound levels exceed 85 dB. Earphones (headset) required with radio shall have built-in hearing protection.

(6) HEAD LAMP: With batteries and attachment for hardhat.

NOTE: It is recommended that fireline personnel wear a short-sleeved t-shirt, underwear, and socks under fire clothing and boots. T-shirts and underwear should be 100% cotton or a 100% flame resistant blend of fibers. Socks should be cotton, wool, or a blend of flame resistant fibers.

Training/Experience

1. RT-130 Annual Fireline Refresher including fire shelter.
2. Commercial Drivers License (for transports, when required).
3. All operators shall be able to operate the equipment safely up to the manufacturer's limitations (i.e., experience working in steep terrain, timber, etc.)

Additional Requirements for Excavators

1. Operator Protection System. Shall have a factory enclosed canopy with deflectors installed in front of the operator area to deflect whipping saplings, branches and debris broken off by the action of the bucket or hydraulic thumb. Deflectors shall be located so as not to impede visibility and access to the cab but still protect the operator from frontal damage.
2. Capability of operating at manufacturer's limitations (i.e., slope).
3. Lighting (2 forward). Lights shall be mounted to the equipment in such a way to provide protection from damage and provide illumination beyond the bucket/thumb.
4. Hydraulic thumb or clamshell. See D.23, Exhibit A for definition.
5. Steel Tracks.

Typing Matrix Table

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Komatsu	Excavator	Track	PC80-3	64	17,810	T-4
Komatsu	Excavator	Track	PC90-1	64	18,470	T-4
Deere	Excavator	Track	290D	65	20,064	T-4
Komatsu	Excavator	Track	PC75R-2	69	16,470	T-4
Caterpillar	Excavator	Track	205 LC	71	28,340	T-4

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Hitachi	Excavator	Track	EX100	72	23,600	T-4
Hitachi	Excavator	Track	EX100-2	72	23,600	T-4
Hitachi	Excavator	Track	EX100-3	72	24,500	T-4
Komatsu	Excavator	Track	PC95-1	72	19,687	T-4
Liebherr	Excavator	Track	R900B	73	28,995	T-4
Deere	Excavator	Track	490D	75	26,546	T-4
Kobelco	Excavator	Track	SK100 MARK III	75	23,800	T-4
Kobelco	Excavator	Track	K904 MARK II	75	24,600	T-4
Hitachi	Excavator	Track	EX110-5	76	24,700	T-4
Caterpillar	Excavator	Track	311B	79	25,005	T-4
Caterpillar	Excavator	Track	311	79	25,100	T-4
Caterpillar	Excavator	Track	E110B	79	25,400	T-4
Daewoo	Excavator	Track	DH130	79	28,440	T-4
Deere	Excavator	Track	110	80	26,724	T-4
Fiat Allis	Excavator	Track	FH120	81	28,440	T-3
Komatsu	Excavator	Track	PC100-6	81	23,700	T-3
Liebherr	Excavator	Track	R902 LC	81	35,060	T-3
Komatsu	Excavator	Track	PC120-3	82	25,570	T-3
Komatsu	Excavator	Track	PC95R-2	82.5	20,635	T-3
Caterpillar	Excavator	Track	312	84	27,200	T-3
Caterpillar	Excavator	Track	312B	84	27,910	T-3
Caterpillar	Excavator	Track	312BL	84	28,170	T-3
Caterpillar	Excavator	Track	E120B	84	28,300	T-3
Dresser (International)	Excavator	Track	6120	84	26,520	T-3
Dresser (International)	Excavator	Track	625E LC	84	31,700	T-3
Kobelco	Excavator	Track	SK120LC MARK III	84	26,500	T-3
Kobelco	Excavator	Track	115SRDZ	84	31,750	T-3

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Komatsu	Excavator	Track	PC120-5	84	26,520	T-3
Komatsu	Excavator	Track	PC120-6	84	26,530	T-3
Komatsu	Excavator	Track	PC128UU-1	84	28,800	T-3
Deere	Excavator	Track	490E	85	26,780	T-3
Kobelco	Excavator	Track	SK100 MARK IV	85	24,100	T-3
Kobelco	Excavator	Track	K905LC MARK II	85	27,300	T-3
Kobelco	Excavator	Track	SK120LC MARK IV	85	27,300	T-3
Link Belt	Excavator	Track	2650 QUANTUM	85	29,641	T-3
Kobelco	Excavator	Track	SK115DZ MARK IV	86	28,400	T-3
Komatsu	Excavator	Track	PC120-6	86	28,375	T-3
Komatsu	Excavator	Track	PC128US-1	86	28,000	T-3
Komatsu	Excavator	Track	PC128US-2	86	29,134	T-3
Komatsu	Excavator	Track	PC128UU-2	86	29,530	T-3
Komatsu	Excavator	Track	PC128UU-2	86	30,360	T-3
Komatsu	Excavator	Track	PC138USLC-2	86	32,537	T-3
Case	Excavator	Track	9010	87	26,662	T-3
Koehring	Excavator	Track	6612	87	27,340	T-3
Link Belt	Excavator	Track	LS-2650C II	87	26,676	T-3
Komatsu	Excavator	track	PC130-7	88	28,600	T-3
Deere	Excavator	Track	120	90	26,790	T-3
Caterpillar	Excavator	Track	312C	90	28,480	T-3
Daewoo	Excavator	Track	DH130-2	91	29,320	T-3
Hitachi	Excavator	Track	EX150	91	32,800	T-3
Volvo	Excavator	Track	EC140C	92	32,370	T-3
Volvo	Excavator	Track	EC145C	92	34,880	T-3
Fiat Allis	Excavator	Track	FX130 LC	93	29,260	T-3
Volvo	Excavator	Track	EC140BLC	93	29,983	T-3

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Kobelco	Excavator	Track	SK130LC MARK IV	93	27,840	T-3
Caterpillar	Excavator	Track	211 LC	94	33,510	T-3
Kobelco	Excavator	Track	135SRLC	94	30,870	T-3
Deere	Excavator	Track	590D	95	33,180	T-3
Deere	Excavator	Track	595D	95	36,882	T-3
Liebherr	Excavator	Track	R912 HD	95	45,747	T-3
Caterpillar	Excavator	Track	315	99	33,730	T-3
Caterpillar	Excavator	Track	315L	99	35,100	T-3
Caterpillar	Excavator	Track	315B	99	35,280	T-3
Caterpillar	Excavator	Track	315BL	99	35,670	T-3
Dresser (International)	Excavator	Track	6150 LC	99	35,240	T-3
Hitachi	Excavator	Track	EX160 LC-5	99	33,960	T-3
Komatsu	Excavator	Track	PC150-3	99	32,165	T-3
Komatsu	Excavator	Track	PC150LC-5	99	32,903	T-3
Komatsu	Excavator	Track	PC150LC-3	99	33,465	T-3
Komatsu	Excavator	Track	PC150-5	99	33,910	T-3
Samsung	Excavator	Track	SE130LC-3	99	29,560	T-3
Samsung	Excavator	Track	SE130LC-2	99	30,040	T-3
Samsung	Excavator	Track	SE130LCM-2	99	31,840	T-3
Samsung	Excavator	Track	SE130LCM-3	99	31,890	T-3
Samsung	Excavator	Track	SE130LCM	99	32,630	T-3
Komatsu	Excavator	Track	PC158USLC-2	99	36,380	T-3
Volvo	Excavator	Track	EC140C L	99	29,542	T-3
Fiat Allis	Excavator	Track	FX140	100	33,069	T-3
Kobelco	Excavator	Track	SK150LC MARK III	100	34,500	T-3
Link Belt	Excavator	Track	LS-2700C II	100	33,950	T-3
Link Belt	Excavator	Track	2700 QUANTUM	100	34,802	T-3

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Samsung	Excavator	Track	SE130LC	100	28,660	T-3
Hyundai	Excavator	Track	130 LC-3	101	30,400	T-3
Daewoo	Excavator	Track	DH170	102	37,700	T-3
Hyundai	Excavator	Track	160 LC-3	102	36,600	T-3
Case	Excavator	Track	9030	103	43,422	T-3
Kobelco	Excavator	Track	SK150LC MARK IV	103	36,207	T-3
Kobelco	Excavator	Track	ED180	103	41,800	T-3
Samsung	Excavator	Track	SE200LC	103	45,414	T-3
Volvo	Excavator	Track	EC130	103	28,660	T-3
Deere	Excavator	Track	160LC	105	34,950	T-3
Komatsu	Excavator	Track	PC150-6	105	39,503	T-3
Case	Excavator	Track	9010B	106	28,000	T-3
Case	Excavator	Track	9020B	106	35,274	T-3
Daewoo	Excavator	Track	SOLAR 130-III	108	29,320	T-3
Volvo	Excavator	Track	EC160BLC	109	37,920	T-3
Caterpillar	Excavator	Track	213B LC	110	39,930	T-3
Hyundai	Excavator	Track	120W	110	25,350	T-3
Hyundai	Excavator	Track	130W-2	110	26,320	T-3
Hyundai	Excavator	Track	130 LC	110	29,100	T-3
Komatsu	Excavator	Track	PC160LC-7	110	37,130	T-3
Komatsu	Excavator	Track	PC160LC-7	111	37,532	T-2
Daewoo	Excavator	Track	SOLAR 170-III	113	36,530	T-2
Caterpillar	Excavator	Track	318BL N	115	40,260	T-2
Caterpillar	Excavator	Track	318BL	115	40,540	T-2
Caterpillar	Excavator	Track	215C LC	115	44,104	T-2
Hyundai	Excavator	Track	170W-3	116	36,300	T-2
Hyundai	Excavator	Track	180 LC-3	116	39,240	T-2

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Volvo	Excavator	Track	EC160CL	116	38,360	T-2
Daewoo	Excavator	Track	DH200LC	117	43,650	T-2
Dresser (International)	Excavator	Track	635E LC	117	42,906	T-2
Caterpillar	Excavator	Track	E200B	118	41,400	T-2
Caterpillar	Excavator	Track	EL200B	118	44,300	T-2
Daewoo	Excavator	Track	DH180LC	118	43,650	T-2
Komatsu	Excavator	Track	PC200LC-3	118	42,245	T-2
Komatsu	Excavator	Track	PF55L	118	46,740	T-2
Fiat Allis	Excavator	Track	FH200	119	43,740	T-2
Fiat Allis	Excavator	Track	FH200 LC	119	43,870	T-2
Hitachi	Excavator	Track	EX200 LC	119	43,506	T-2
Liebherr	Excavator	Track	R912 LC	122	43,900	T-2
Dresser (International)	Excavator	Track	6200 LC	123	44,310	T-2
Kobelco	Excavator	Track	K907LC MARK II	123	43,390	T-2
Komatsu	Excavator	Track	PC200LC-5	123	43,500	T-2
Caterpillar	Excavator	Track	215D LC	125	43,523	T-2
Deere	Excavator	Track	690D	125	40,990	T-2
Link Belt	Excavator	Track	LS-2800C II	125	43,430	T-2
Hyundai	Excavator	Track	200 LCM-2	126	45,060	T-2
Koehring	Excavator	Track	6620	126	42,555	T-2
Komatsu	Excavator	Track	PC200-5	127	42,860	T-2
Caterpillar	Excavator	Track	320N	128	42,660	T-2
Caterpillar	Excavator	Track	320B	128	42,770	T-2
Caterpillar	Excavator	Track	320	128	43,577	T-2
Caterpillar	Excavator	Track	320BN	128	44,190	T-2
Caterpillar	Excavator	Track	320BL	128	45,680	T-2
Caterpillar	Excavator	Track	320L	128	46,277	T-2

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Hyundai	Excavator	Track	200 LC	128	44,360	T-2
Komatsu	Excavator	Track	PC2006B	128	44,980	T-2
Komatsu	Excavator	Track	PC228USLC-2	128	50,485	T-2
Komatsu	Excavator	Track	PC228USLC-1	128	50,490	T-2
Link Belt	Excavator	Track	2800 QUANTUM	128	44,911	T-2
Link Belt	Excavator	Track	2800 QUANTUM LF	128	49,011	T-2
Case	Excavator	Track	9020	130	34,011	T-2
Deere	Excavator	Track	690E LC	130	44,213	T-2
Hyundai	Excavator	Track	210 LC-3	130	46,960	T-2
Liebherr	Excavator	Track	R912 HDSL	130	46,735	T-2
Samsung	Excavator	Track	SE210LC	130	44,100	T-2
Case	Excavator	Track	9030B N	131	44,000	T-2
Case	Excavator	Track	9030B	131	44,450	T-2
Hitachi	Excavator	Track	EX200 LC-2	132	43,400	T-2
Hitachi	Excavator	Track	EX200 LC-3	132	43,400	T-2
Hitachi	Excavator	Track	EX200 LC-5	132	45,000	T-2
Daewoo	Excavator	Track	DH220LC	133	46,300	T-2
Kobelco	Excavator	Track	SK200LC MARK III	133	44,500	T-2
Komatsu	Excavator	Track	PC210LC-6	133	21,180	T-2
Komatsu	Excavator	Track	PC600-6	133	44,430	T-2
Komatsu	Excavator	Track	PC200LC-6	133	46,970	T-2
Komatsu	Excavator	Track	PC200Z-6	133	N/A	T-2
Case	Excavator	Track	125B	134	53,619	T-2
Daewoo	Excavator	Track	SOLAR 220LC-III	135	44,300	T-2
Fiat Allis	Excavator	Track	FX200 LC	135	43,142	T-2
Liebherr	Excavator	Track	R922 LC	136	45,835	T-2
Samsung	Excavator	Track	SE210LC-2	136	49,550	T-2

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Fiat Allis	Excavator	Track	FX210 LC	137	43,780	T-2
Caterpillar	Excavator	Track	219D	140	47,793	T-2
Caterpillar	Excavator	Track	219D LC	140	48,963	T-2
Deere	Excavator	Track	200LC	140	44,750	T-2
Hyundai	Excavator	Track	200W-2	141	41,440	T-2
Kobelco	Excavator	Track	SK200LC MARK IV	141	45,900	T-2
Kobelco	Excavator	Track	235SRLC	142	56,889	T-2
Komatsu	Excavator	Track	PC200LC-7	143	46,870	T-2
Kobelco	Excavator	Track	SK210LC	143	47,000	T-2
Liebherr	Excavator	Track	R922 HDSL	143	52,560	T-2
Samsung	Excavator	Track	SE210LC-3	143	46,720	T-2
Hyundai	Excavator	Track	200W	144	41,435	T-2
Koehring	Excavator	Track	4470 TELESCOPE	145	40,300	T-2
Volvo	Excavator	Track	EC200	145	43,652	T-2
Volvo	Excavator	Track	EC210C	147	51,200	T-2
Volvo	Excavator	Track	ECR235C	147	57,760	T-2
Caterpillar	Excavator	Track	E240	148	50,705	T-2
Caterpillar	Excavator	Track	E240B	148	50,705	T-2
Caterpillar	Excavator	Track	E240C	148	50,705	T-2
Caterpillar	Excavator	Track	EL240B	148	52,028	T-2
Caterpillar	Excavator	Track	EL240C	148	52,028	T-2
Caterpillar	Excavator	Track	EL240	148	52,030	T-2
Komatsu	Excavator	Track	PC220LC-3	148	51,120	T-2
Fiat Allis	Excavator	Track	FH220 LC	151	54,540	T-2
Fiat Allis	Excavator	Track	FH220	151	54,585	T-2
Koehring	Excavator	Track	6625	151	55,250	T-2
Liebherr	Excavator	Track	R932 HD	152	53,261	T-2

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Caterpillar	Excavator	Track	322BL	153	52,600	T-2
Dresser (International)	Excavator	Track	6220 LC	153	51,630	T-2
Kobelco	Excavator	Track	K909LC MARK II	153	52,210	T-2
Link Belt	Excavator	Track	LS-3400C II	153	52,910	T-2
Link Belt	Excavator	Track	3400 QUANTUM	153	53,332	T-2
Link Belt	Excavator	Track	LS-3400LF C II	153	58,212	T-2
Link Belt	Excavator	Track	3400 QUANTUM LF	153	59,461	T-2
Deere	Excavator	Track	790D	155	50,014	T-2
Hitachi	Excavator	Track	EX220 LC-3	156	52,500	T-1
Hitachi	Excavator	Track	EX230 LC-5	156	52,500	T-1
Komatsu	Excavator	Track	PC220LC-5	157	50,990	T-1
Komatsu	Excavator	Track	PC220LC-6	158	53,364	T-1
Komatsu	Excavator	Track	PC250LC-6	158	60,795	T-1
Dresser (International)	Excavator	Track	645	159	48,400	T-1
Insley	Excavator	Track	H600D	159	38,340	T-1
Deere	Excavator	Track	790E LC	155	51,725	T-1
Hitachi	Excavator	Track	EX270	161	57,300	T-1
Hitachi	Excavator	Track	EX270 LC	161	60,600	T-1
Hyundai	Excavator	Track	250 LC-3	161	54,200	T-1
Liebherr	Excavator	Track	R932 HDSL	161	58,010	T-1
Kobelco	Excavator	Track	SK220LC MARK III	163	53,800	T-1
Caterpillar	Excavator	Track	225D	165	56,860	T-1
Caterpillar	Excavator	Track	225D LC	165	58,680	T-1
Deere	Excavator	Track	792D LC	165	60,250	T-1
Fiat Allis	Excavator	Track	FX240 LC	165	54,674	T-1
Case	Excavator	Track	9040	166	52,905	T-1
Caterpillar	Excavator	Track	325	168	56,270	T-1

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Caterpillar	Excavator	Track	325L	168	59,560	T-1
Caterpillar	Excavator	Track	325BL	168	60,600	T-1
Hitachi	Excavator	Track	EX270 LC-5	168	60,860	T-1
Insley	Excavator	Track	H800D	168	43,910	T-1
Komatsu	Excavator	Track	PC280LC-3	168	59,180	T-1
Samsung	Excavator	Track	SE240LC-3	168	53,160	T-1
Fiat Allis	Excavator	Track	FX250 LC	169	54,044	T-1
Deere	Excavator	Track	230LC	170	54,410	T-1
Volvo	Excavator	Track	EC240C	170	57,750	T-1
Komatsu	Excavator	Track	PC270LC-6	174	64,374	T-1
Kobelco	Excavator	Track	SK220LC MARK IV	175	55,800	T-1
Kobelco	Excavator	Track	SK270LC MARK IV	175	61,997	T-1
Kobelco	Excavator	Track	SK250LC	176	54,700	T-1
Daewoo	Excavator	Track	DH280	177	62,200	T-1
Case	Excavator	Track	9040B	178	53,140	T-1
Case	Excavator	Track	9045B	178	62,300	T-1
Link Belt	Excavator	Track	3900 QUANTUM	178	62,536	T-1
Samsung	Excavator	Track	SE280LC-2	178	66,020	T-1
Caterpillar	Excavator	Track	229	180	69,466	T-1
Deere	Excavator	Track	270LC	180	60,660	T-1
Samsung	Excavator	Track	SE280LC	180	59,970	T-1
Daewoo	Excavator	Track	SOLAR 280LC-III	182	63,720	T-1
Koehring	Excavator	Track	6627	182	61,850	T-1
Hyundai	Excavator	Track	290 LC-3	183	64,200	T-1
Fiat Allis	Excavator	Track	FX270 LC	184	59,304	T-1
Kobelco	Excavator	Track	SK290LC	185	66,100	T-1
Caterpillar	Excavator	Track	E300	187	67,240	T-1

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Caterpillar	Excavator	Track	EL300	187	69,665	T-1
Insley	Excavator	Track	H1000D	189	54,720	T-1
Deere	Excavator	Track	892D LC	195	65,983	T-1
Fiat Allis	Excavator	Track	FX310 LC	195	70,400	T-1
Hyundai	Excavator	Track	280 LC	195	59,900	T-1
Hyundai	Excavator	Track	290 LC	197	62,170	T-1
Komatsu	Excavator	Track	PC300LC-3	197	67,900	T-1
Samsung	Excavator	Track	SE280LC-3	197	63,390	T-1
Caterpillar	Excavator	Track	231D	200	76,740	T-1
Caterpillar	Excavator	Track	231D LC	200	77,340	T-1
Case	Excavator	Track	170C	201	72,395	T-1
Dresser (International)	Excavator	Track	650B	204	70,500	T-1
Caterpillar	Excavator	Track	EL300B	207	69,500	T-1
Dresser (International)	Excavator	Track	6300 LC	207	68,790	T-1
Komatsu	Excavator	Track	PC300LC-5	207	68,790	T-1
Link Belt	Excavator	Track	LS-4300C II	207	68,123	T-1
Hitachi	Excavator	Track	EX300 LC-2	208	66,600	T-1
Hitachi	Excavator	Track	EX300 LC-3	208	68,100	T-1
Komatsu	Excavator	Track	PC360LC-3	212	78,700	T-1
Liebherr	Excavator	Track	R942 HDSL	212	70,920	T-1
Hyundai	Excavator	Track	320 LC-3	218	70,330	T-1
Deere	Excavator	Track	982E LC	220	67,450	T-1
Caterpillar	Excavator	Track	330	222	70,680	T-1
Caterpillar	Excavator	Track	330L	222	73,770	T-1
Caterpillar	Excavator	Track	330BL	222	76,300	T-1
Case	Excavator	Track	9050	223	69,237	T-1
Liebherr	Excavator	Track	R952 HD	225	95,500	T-1

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Kobelco	Excavator	Track	K912LC MARK II	227	69,900	T-1
Kobelco	Excavator	Track	SK300LC MARK II	227	69,900	T-1
Koehring	Excavator	Track	6633	227	71,860	T-1
Hitachi	Excavator	Track	EX330 LC-5	228	71,649	T-1
Hitachi	Excavator	Track	EX370-5	228	80,247	T-1
Fiat Allis	Excavator	Track	FX350 LC	230	78,925	T-1
Kobelco	Excavator	Track	SK300LC MARK III	230	69,900	T-1
Komatsu	Excavator	Track	PC300LC-6	232	73,149	T-1
Komatsu	Excavator	Track	PC300HD-6	232	79,785	T-1
Deere	Excavator	Track	330LC	235	72,800	T-1
Deere	Excavator	Track	370	235	81,200	T-1
Hyundai	Excavator	Track	320 LC	235	69,670	T-1
Kobelco	Excavator	Track	SK300LC MARK IV	238	73,300	T-1
Kobelco	Excavator	Track	SK330LC	238	77,800	T-1
Case	Excavator	Track	9050B	240	71,400	T-1
Link Belt	Excavator	Track	4300 QUANTUM	240	73,600	T-1
Daewoo	Excavator	Track	SOLAR 330-III	244	71,720	T-1
Daewoo	Excavator	Track	DH320	247	70,500	T-1
Samsung	Excavator	Track	SE350LC-2	247	81,330	T-1
Caterpillar	Excavator	Track	235C	250	90,075	T-1
Caterpillar	Excavator	Track	235C	250	93,144	T-1
Caterpillar	Excavator	Track	235D	250	103,785	T-1
Caterpillar	Excavator	Track	235D LC	250	108,621	T-1
Samsung	Excavator	Track	SE350LC	250	77,600	T-1
Insley	Excavator	Track	H1500D	253	78,050	T-1
Daewoo	Excavator	Track	SOLAR 400LC-III	260	86,680	T-1
Hyundai	Excavator	Track	360 LC-3	260	81,800	T-1

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Deere	Excavator	Track	992D LC	265	96,780	T-1
Komatsu	Excavator	Track	PC400LC-3	266	93,145	T-1
Hitachi	Excavator	Track	EX400 LD-3	275	90,400	T-1
Hitachi	Excavator	Track	EX400 LC	275	97,200	T-1
Case	Excavator	Track	9060	276	96,512	T-1
Dresser (International)	Excavator	Track	6400 LC	276	93,320	T-1
Hyundai	Excavator	Track	420 LC	276	95,000	T-1
Hyundai	Excavator	Track	450 LC	276	97,890	T-1
Komatsu	Excavator	Track	PC400LC-5	276	93,570	T-1
Deere	Excavator	Track	450LC	285	97,680	T-1
Caterpillar	Excavator	Track	350	286	109,620	T-1
Caterpillar	Excavator	Track	350L	286	111,377	T-1
Hyundai	Excavator	Track	450 LC-3	286	97,660	T-1
Kobelco	Excavator	Track	K916LC MARK II	286	98,230	T-1
Kobelco	Excavator	Track	SK400LC MARK II	286	98,230	T-1
Koehring	Excavator	Track	6644	289	97,300	T-1
Liebherr	Excavator	Track	R954 HD	289	105,420	T-1
Caterpillar	Excavator	Track	345BL	290	98,750	T-1
Daewoo	Excavator	Track	SOLAR 450-III	296	96,562	T-1
Hitachi	Excavator	Track	EX400-3	296	90,400	T-1
Hitachi	Excavator	Track	EX400 LD-3	296	---	T-1
Samsung	Excavator	Track	SE450LC-2	296	99,200	T-1
Case	Excavator	Track	9060B	300	99,958	T-1
Insley	Excavator	Track	H2500C	300	97,300	T-1
Kobelco	Excavator	Track	SK400LC MARK III	300	99,370	T-1
Link Belt	Excavator	Track	58000 QUANTUM	300	102,745	T-1
Hitachi	Excavator	Track	EX400 LC-3	301	97,200	T-1

Manufacture Name	Equipment		Model	Horse Power	Weight	Equipment Class
Hitachi	Excavator	Track	EX450 LC-5	301	100,800	T-1
Kobelco	Excavator	Track	SK400LC MARK IV	306	101,684	T-1
Komatsu	Excavator	Track	PC400LC-6	306	95,147	T-1
Komatsu	Excavator	Track	PC400HD-6	306	97,665	T-1
Insley	Excavator	Track	H2500D	315	96,850	T-1
Caterpillar	Excavator	Track	245B	360	143,850	T-1

PAYMENT

- a. On-Shift includes time worked, time that resource is held or directed to be in a state of readiness, and compensable travel (resource traveling under its own power) that has a specific start and ending time.
- b. DOUBLE SHIFT equipment is staffed with two operators or crews (one per shift). There will be no compensation for a double shift unless a separate operator is ordered in writing for the second shift. Agency personnel at the Section Chief level may, by resource order, authorize a second operator if needed during the assignment. Double shifts, when ordered, will be paid at 165% of the daily rate.
- c. DAILY RATE - Payment will be made on basis of calendar days (0001 - 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.
- d. MINIMUM DAILY GUARANTEE - For each calendar day that the transport is required to remain at the incident, prior to offloading the dozer/excavator/tractor plow, the minimum daily guarantee will be paid. For any time under hire for at least 8 hours, the government will pay no less than the minimum daily guarantee, or the mileage rate, whichever is greater. If a resource is under hire for less than 8 hours during a calendar day, the amount earned for that day will not be less than one-half the minimum daily guarantee. HEAVY EQUIPMENT THAT HAS ONE OPERATOR FOR THE TRANSPORT AND THE HEAVY EQUIPMENT WILL BE PAID AT 65% OF THE RATE FOR THE TRANSPORT - MINIMUM DAILY GUARANTEE.

FALLER MODULE

Services of Single Fallers and Faller Modules (2 fallers) for falling fire damaged and hazardous trees for use on a local, regional and nationwide basis. The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, trained/qualified personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Equipment (saw(s) and vehicle(s)) shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

Contractor provided equipment

Contractor shall be responsible for ensuring all personnel arrive at the incident with the proper Personal Protective Clothing and Equipment as prescribed in the agreement. Contractor shall be responsible for ensuring the Personal Protective Equipment is operable and maintained in good repair throughout the duration of any assignment. Personal Protective Clothing will be maintained in good repair, and be cleaned at sufficient intervals to preclude unsafe working conditions. All personnel shall be wearing Personal Protective Clothing, including boots, upon arrival at the incident. Contractor shall be responsible for ensuring that all personnel arrive with the following:

Personal Protective Equipment (PPE)

- (1) BOOTS: All Leather uppers, lace-up type, minimum of 8 inches high with lug type sole in good condition (steel toed boots are not acceptable).
- (2) HARD HAT: Hardhat meeting NFPA Standard 1977 is required.
- (3) GLOVES: One pair of heavy-duty leather per person.
- (4) CHAPS: One pair per person meeting USFS Specification 6170-4F or certified to NFPA 1977.
- (5) EYE PROTECTION: One pair (meets standards ANSI Z87, latest edition).
- (6) HEARING PROTECTION: Use hearing protection whenever sound levels exceed 85 dB.
- (7) HEAD LAMP: With batteries and attachment for hardhat.
- (8) FIRE SHELTER: New Generation Fire Shelter is required.

(9) FLAME RESISTANT CLOTHING (Shirt and Pants). A minimum of two full sets of flame resistant shirt and pants. For routine fireline duties, flame resistant clothing must be certified to NFPA 1977.

NOTE: It is recommended that fireline personnel wear a short-sleeved t-shirt, underwear, and socks under fire clothing and boots. T-shirts and underwear should be 100% cotton or a 100% flame resistant blend of fibers. Socks should be cotton, wool, or a blend of flame resistant fibers.

Chainsaw: Two (2) required per faller.

- (1) Operational.
- (2) Minimum of 30" or longer bar for larger diameter timber.
- (3) Power head minimum 67 cubic centimeter (cc) or larger.
- (4) Operational approved spark arrester.
- (5) Chainbrake (functional).
- (6) All necessary maintenance tools, supplies, and parts to keep the saw operating in a safe and efficient manner (i.e. bar or saw tool, files, chain, gas/oil, etc.).

Other Equipment:

- (1) Wedges
- (2) Falling axe

Transportation

The Contractor shall provide dependable ground transportation that meets all State and Federal laws relating to motor vehicle operation. The vehicle must be capable of providing transportation to and from the fireline. The Contractor shall ensure that seatbelts will be available and used by every passenger in any vehicle while in motion. Vehicle MUST be 4-wheel or all wheel drive capable.

Vehicle must be capable of carrying saws and hazardous materials (i.e. fuel) external from the passenger compartment.

Training/Experience

Each person under this Agreement shall meet the following minimum requirements:

1. 3 years experience in the commercial logging industry as a timber faller and/or 3 years experience as a faller on wildfire incidents (1,000 hours of timber falling is equal to 1 year of experience).
2. RT-130 Annual Fireline Refresher including fire shelter.
3. Light Work Capacity Fitness Test (walk 1 mile with no pack in 16 minutes).

The government reserves the right to verify training and experience at any time for all fallers.

PAYMENT

- a. On-Shift includes time worked, time that resource is held or directed to be in a state of readiness, and compensable travel (resource traveling under its own power) that has a specific start and ending time.
- b. Daily Rate - Payment will be made on basis of calendar days (0001 - 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.

FUEL TENDER

Services to provide Fuel Tender (s) for use on a local, Regional and Nationwide basis. The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications. Fuel Tenders may be used on mountainous roads with gravel or native surfaces, narrow, unimproved roads, off roads, in mountainous, rangeland and timbered areas, and may be operated where there is brush and trees growing on the shoulders. See definition of ordinary wear and tear. The contractor supplied Fuel Tender operator has the final say on where and how the vehicle can be used.

EQUIPMENT REQUIREMENTS

Equipment shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

Equipment Typing

- Type 1 – 3501+ gallons
- Type 2 – 2501 - 3500 gallons
- Type 3 – 500 - 2500 gallons

Equipment Requirements

- (a) Fuel Tender shall be fully registered as a commercial vehicle and be current with all DOT, EPA and state inspection requirements.
- (b) Fuel Tenders shall be provided with a qualified operator at all times.
 - Fuel Tender dispensing system shall have a separate dispensing system for each product offered. The Contractor shall provide diesel and unleaded fuel.
 - Fuel Tender shall contain a certified meter to measure accurate deliveries.
 - Spill containment kits are required and must meet state and federal hazardous materials containment requirements.

Fuel Tender tank shall have the following proof of testing:

- (a) Have proof of a current yearly visual and leakage (VK) test
- (b) Have proof of an Internal and Pressure (I&P) within the last 5 years
- (c) All fuel tenders must comply with local certification processes.
- (d) Valves:
 - 1. All tank control valves shall be protected by an emergency shutoff valve.
 - 2. Handles shall be painted red or a decal should direct the user to the emergency valve.
 - 3. All valves shall shut completely with no leaking fuel
 - 4. Tank control valves shall be equipped with fusible nuts
- (e) Wiring:
 - 1. All electrical wiring within tank compartments shall be covered with no exposed wire
 - 2. All lights and switches shall be in explosion proof housings
 - 3. Openings into fixtures shall be protected with rubber grommets to seal out fuel fumes.
- (f) Hoses and nozzles:
 - 1. Nozzles shall be of proper size for dispensing fuel
 - 2. Large nozzle for Diesel
 - 3. Small for unleaded
 - 4. Hoses shall be in good condition with no deep cracks or leaking surfaces

Fuel Tender must have a bonded hose reel and/or a ground rod and cable for grounding the tender while fueling.

- (a) Safety Items
 - 1. 2A-10BC Fire Extinguisher
 - 2. Fuel spill response kit
 - 3. Hazardous materials compliance pocketbook

4. Emergency Response guidebook (Most Current Edition)

All Fuel Tenders shall have:

- (a) An audible reverse warning device (backup alarm) of 87 decibel or greater measured at 5 feet behind and in the center of the equipment.
- (b) A fire extinguisher, multi-purpose 2A-10BC that is securely mounted to the vehicle and accessible by the operator. The fire extinguisher shall have a current annual inspection tag and the annual maintenance tag in regards to a 6 year annual inspection and every 12 years regarding a hydro test on all dry powder, metal fire extinguishers.
- (c) Chock Blocks appropriate size (2 Required)
- (d) Seat belts available for driver and any passengers.
- (e) Flashlight (Minimum of 2 "D" Battery)

Operational Requirements

- (a) The Contractor shall provide a properly trained and licensed operator to manage the daily operations of the fuel tender. The Contractor shall be responsible to provide fuel for the incident in a safe and efficient manner.
- (b) Contractors shall be able to accept all major credit cards for payment of fuel and providing receipts for sales at the incident. If camp location precludes the use of credit cards, the Contractor shall complete the Emergency Equipment Fuel and Oil Issue tickets, OF-304, and reconcile them with the finance section on a daily basis.
 - 1. Fuel will be paid at the current local commercial bulk fuel price. Per gallon price will be established at the time of hire and shall be displayed in a visible fashion. Due to the rapidly changing nature of fuel prices, no guarantees can be made for prices of fuel and the contractor has the right to charge what is fair and accurate based on the bulk fuel price.
 - 2. No separate payments will be made for nursing tender or spill containment kits or structures.
 - 3. Off-road diesel fuel shall not be dispensed by the fuel tender.

All transportation vehicles shall be in sound mechanical condition with sufficient horsepower and mainframe configurations to ensure successful performance on roads and highways, or in terrain described in these specifications. All vehicles under this Agreement shall be able to be legally driven on highways under their own power and be able to travel at a minimum of 50 miles an hour.

Fuel Containment Structures and Spill Prevention, Control, and Countermeasures

Contractors shall provide a portable fuel containment structure to contain potential spills/leaks. Storage containment structures shall be portable with collapsible walls, have

the capacity to hold 110 percent of the contents of the tank capacity plus freeboard for precipitation, and shall be impermeable. A manual sump pump shall be used to collect rain water that may accumulate in the containment structure. Any discharge should be inspected for petroleum/chemicals prior to being dispensed.

If fuel storage exceeds 1,320 gallons in containers of 55 gallons or greater, the Contractor shall prepare a Spill Prevention Control and Countermeasures Plan (SPCC). Contractors may self-certify their SPCC Plan if storage capacity is 10,000 gallons or less (reference 40 CFP, Appendix G to Part 112). Contractor shall comply with spill reporting requirements in accordance with 40 CFR 110. The Contractor shall take whatever initial action to safely contain all spills.

PAYMENT

- a. On-Shift includes time worked, time that resource is held or directed to be in a state of readiness, and compensable travel (resource traveling under its own power) that has a specific start and ending time.
- b. **Double Shift** equipment is staffed with two operators or crews (one per shift). There will be no compensation for a double shift unless a separate operator is ordered in writing for the second shift. Agency personnel at the Section Chief level may, by resource order, authorize a second operator if needed during the assignment. Double shifts, when ordered, will be paid at 165% of the daily rate.
- c. **Daily Rate** - Payment will be made on basis of calendar days (0001 – 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours

GIS UNITS

Services to provide GIS units for use on a local, Regional and Nationwide basis, to produce maps for incident support. The Contractor is responsible for all equipment, materials (unless otherwise specified), supplies (unless otherwise specified), transportation, lodging, trained/qualified personnel (if ordered), and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Contractor Provided Equipment. Equipment (GIS unit(s) and transportation vehicle(s)) shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

Minimum Equipment Requirements:

Trailer, either cargo or camper style (applicable to ALL TYPES being solicited):

1. Minimum 20' length x 7' wide, excluding tongue.
2. Air Conditioning Unit(s): Self contained, climate controlled unit with air conditioning (air conditioned to maintain 70 to 75 F degree temperature in trailer).
3. Heating System: Sufficient to provide heating commensurate with the internal trailer dimensions, installed electric base board heaters or propane gas equivalent; no free standing heaters (heating system to maintain 70 to 75 F degree temperature in trailer).
4. AC power source (generator) that is adequate to provide sufficient power for all onboard systems.
5. All necessary fuel and power (The Contractor is authorized to purchase fuel from the fuel vendor if provided at the incident, fuel vendors will be required to accept credit cards. In the event the unit comes unoperated, fuel will be supplied by the government but the cost for that fuel will be deducted from the vendor's use invoice. Fuel supplied by the Government will be documented on the OF-304, Fuel and Oil Issue and copies of those fuel issues will be in the vendor's use envelope).
6. Uninterruptable Power Supply (UPS) and line conditioner system.
7. Unit must meet Occupational Safety and Health Administration (OSHA) work environment requirements.
8. Wheel Chocks: Two (2) sets minimum, one set for each side of trailer (or unit).
9. Trailer stabilizer.
10. Awning: The awning is optional but if one is provided it shall be a workable standard trailer awning, minimum 14' length.
11. Windows: Windows are optional but if they are provided a minimum of two (2), 30" W x 26" H for natural lighting and air flow, (one in each work area).
12. Internal Lighting: Sufficient to provide adequate light for night time operations. In addition, all lighting for individual workstations can either be wall mounted or ceiling mounted as long as it produces a light level of 50 average maintained foot-candles at the working surface. This shall be maintained throughout the working space.
13. Outside Lighting: Sufficient to provide light all entrance ways (two way directional security light).
14. Steps: If needed, to provide safe entry/exit from the trailer or unit.

Type 1:

1. Four (4) computer workstations with Windows based operating systems (Windows 2000 SP4 or better, Windows XP SP3 or better is preferred). Computers must be able to be configured to accept Dynamic Host Configuration

- Protocol (DHCP) service for connectivity. All computers will be configurable for administrative rights for incident personnel.
2. Workspace and tables/chairs to accommodate an additional two (2) workers, for a total of six (6) workstations.
 3. All computer workstations, printers and plotters shall be networked, expandable to an additional ten (10) external workstations (i.e., 16-port router).
 4. Minimum Connectivity speed of 100 mbs, up to 1 Gbps.
 5. Network cables and power strips.
 6. A system administrator for initial setup of systems and network. System administrator must be available as-needed within 24 hours, to ensure functionality.
 7. Re-imaging or clone hard drive capabilities required for system failure.
 8. Daily backup capability or redundancy of all data and products.
 9. DVD/CD RW writer on each workstation/server.
 10. ArcGIS 9.3.1, or most current version, installed with ArcInfo License.
 11. ArcGIS extensions (most recent versions) to include: ArcPress, Fire Incident Mapping Tool (FIMT), Spatial Analyst, 3D Analyst, Xtools, Minn.DNR Garmin (GPS download software), and Customized Style files for Incident Command System (ICS) symbology provided for ArcGIS.
 12. Microsoft Office Suite or better (Office XP or Office 2007 preferred). Office must include Word, Excel, Access, Power Point, and Front Page.
 13. Photo editing software.
 14. Color printer (1), capable of 11" x 17" prints, networked (not USB) (i.e. HP 1220 or equivalent).
 15. Large format (E size) plotter (i.e. HP 1055CM, HP 5000, HP 800 or equivalent).
 16. Vendor shall arrive at the incident with the following supplies for number 13 and 14:
 - a. Large format plotter - two (2) full sets of ink and twenty (20) rolls of paper (a minimum of 5 rolls shall be a base weight of 24 lb. and a minimum length of 150' per roll);
 - b. Color printer - two (2) full sets of printer cartridges and two (2) reams each of 8 ½" x 11" and 11" x 17" paper (all paper shall contain a minimum of 30% recycled content);
 - c. During the incident, all plotter and printer supplies (i.e., consumable items) will be purchased by the incident. The intent of this clause is to pass through to the incident the cost of the supplies listed above that are consumed during the incident. The vendor would leave the incident with the same supplies they arrived with (i.e., two (2) full sets of ink and twenty (20) rolls of paper for the plotter; two (2) full sets of printer cartridges and two (2) reams each of 8½" x 11" and 11" x 17" paper for the color printer). If the (consumable supplies) are unable to be provided to the vendor before they depart the incident, the vendor can submit a claim for reimbursement (based on current catalog pricing). See Section C.5 for claim settlement authority.

17. White board (minimum 2' x 3') with dry erase marker.

Type 2:

1. Two (2) computer workstations with Windows based operating systems (Windows 2000 SP4 or better, Windows XP SP3 or better is preferred). Computers must be able to be configured to accept Dynamic Host Configuration Protocol (DHCP) service for connectivity. All computers will be configurable for administrative rights for incident personnel.
2. Workspace and tables/chairs to accommodate an additional two (2) workers, for a total of four (4) workers.
3. All computer workstations, printers and plotters shall be networked, expandable to an additional ten (10) external workstations (i.e., 16-port router).
4. Minimum Connectivity speed of 100 mbs, up to 1 Gbps.
5. Network cables and power strips.
6. A system administrator for initial setup of systems and network. System administrator must be available as-needed within 24 hours, to ensure functionality.
7. Re-imaging or clone hard drive capabilities required for system failure.
8. Daily backup capability or redundancy of all data and products.
9. DVD/CD RW writer on each workstation/server.
10. ArcGIS 9.3.1, or most current version, installed with ArcInfo License.
11. ArcGIS extensions (most recent versions) to include: ArcPress, Fire Incident Mapping Tool (FIMT), Spatial Analyst, 3D Analyst, Xtools, Minn.DNR Garmin (GPS download software), and Customized Style files for Incident Command System (ICS) symbology provided for ArcGIS.
12. Microsoft Office Suite, 2000 Professional or better (Office XP or Office 2007 preferred). Office must include Word, Excel, Access, Power Point, and Front Page.
13. Photo editing software.
14. Color printer (1), capable of 11" x 17" prints, networked (not USB) (i.e. HP 1220 or equivalent).
15. Large format (E size) plotter (i.e. HP 1055CM, HP 5000, HP 800 or equivalent).
16. Vendor shall arrive at the incident with the following supplies for number 13 and 14:
 - a. Large format plotter - two (2) full sets of ink and twenty (20) rolls of paper (a minimum of 5 rolls shall be a base weight of 24 lb. and a minimum length of 150' per roll);
 - b. Color printer - two (2) full sets of printer cartridges and two (2) reams each of 8 ½" x 11" and 11" x 17" paper (all paper shall contain a minimum of 30% recycled content);
 - c. During the incident, all plotter and printer supplies (i.e., consumable items) will be purchased by the incident. The intent of this clause is to pass through to the incident the cost of the supplies listed above that are consumed during the incident. The vendor would leave the incident with

the same supplies they arrived with (i.e., two (2) full sets of ink and twenty (20) rolls of paper for the plotter; two (2) full sets of printer cartridges and two (2) reams each of 8½" x 11" and 11" x 17" paper for the color printer). If the consumable supplies are unable to be provided to the vendor before they depart the incident, the vendor can submit a claim for reimbursement (based on current catalog pricing). See Section C.5 for claim settlement authority.

17. White board (minimum 2' x 3') with dry erase marker.

Type 3:

1. Workspace and tables/chairs to accommodate a minimum of five (5) workers
2. Network cables and power strips.
3. Color printer (1), capable of 11" x 17" prints, networked (not USB) (i.e. HP 1220 or equivalent).
4. Large format (E size) plotter (i.e. HP 1055CM, HP 5000, HP 800 or equivalent).
5. Ancillary network hardware such as Cat 5e cables.
6. Network Switch or Router that meets the following specs:
 - a. **Standards:** Draft 802.11n, 802.11g, 802.11b, 802.3, 802.3u
 - b. **Ports:** Power, Internet, Ethernet
 - c. **Buttons:** Reset, Wi-Fi Protected Setup
 - d. **LEDs:** Ethernet (1-4), Wi-Fi Protected Setup, Wireless, Internet, Power
 - e. **Cabling Type:** CAT 5e
 - f. **# of Antennas:** 1 or 2
 - g. **Detachable (Y/N):** No
 - h. **RF Pwr (EIRP) in dBm:** 14 dBm
 - i. **UPnP able/cert:** Able
 - j. **Security Features:** WEP, WPA, WPA2
 - k. **Security Key Bits:** 128-Bit, 256-Bit
7. White board (minimum 2' x 3') with dry erase marker.

Optional Item: Satellite or high speed internet connection which may be made available to support other units in the incident camp.

1. Minimum bandwidth: 1.5Meg/s Download speed, 768kbps Upload speed.
2. Dynamic IP addressing with port address translating or static ip addressing must allow at least 40 internal concurrent host accesses.
3. The ability to support for 3DES IPsec tunneling is required to support end to end solutions where remote access is needed.
4. Minimum Hardware: WI-FI Access Points: 802.11 A/B/G compatible with WEP key encryption options.
5. Browser administrated.
6. Power over Ethernet capable.
7. POE 8 port data switch.

Incident Related Data: All base data, Digital Raster Graphics (DRG), Ortho quads, roads, streams, etc. will be supplied by the incident. All data provided on the incident and products produced will be under the direction of the Situation Unit Leader or Plans Chief. No product or data shall be removed from the incident. Some data is sensitive in nature and shall be wiped from all systems prior to demobilization.

The following ten (10) Basic Map Products are generally produced for Incident Support. For more details on these reports, refer to the following publication "GIS Standard Operating Procedures on Incidents," June 2006, PMS 936 or NFES 2809 (the link is: <http://www.nwccg.gov/pms/pubs/GSTOP7.pdf>)

1. Incident Action Plan (IAP) Map
2. Incident Briefing Map
3. Situations/Plans Map
4. Transportation Map
5. Facilities Map
6. Aviation Map
7. Progression Map
8. Ownership Map
9. Damage Assessment Map
10. Rehabilitation Map

All transportation vehicles shall be in sound mechanical condition with sufficient horsepower and mainframe configurations to ensure successful performance on roads and highways, or in terrain described in these specifications. All vehicles under this Agreement shall be able to be legally driven on highways under their own power and be able to travel at a minimum of 50 miles an hour.

Training/Experience

The Contractor may be required to provide one or more GIS Specialist(s) (GISS). If ordered, the minimum qualifications stated below must be met.

GIS Specialist (GISS) Qualifications - All GISS personnel shall be trained in accordance with NWCCG Wildland Fire Qualifications Systems Guide PMS 310-1 for this position.

PAYMENT

- a. On-Shift includes time worked, time that resource is held or directed to be in a state of readiness, and compensable travel (resource traveling under its own power) that has a specific start and ending time.

- b. Daily Rate - Payment will be made on basis of calendar days (0001 - 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.

GRAY WATER TRUCK

Services for Gray Water Trucks for use on a local, regional and nationwide basis. The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, trained/certified personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Equipment shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

Equipment Typing

- Type 1 – 4000+ gallons
- Type 2 – 2500-3999 gallons
- Type 3 – 1000-2499 gallons
- Type 4 – 400-999 gallons

Equipment Requirements

- (a) Tanks shall be constructed to the following requirements at a minimum and if established, meet all State requirements for certification compliance:
- (1) Tanks shall meet industry standards, be of metal construction, welded or riveted, and shall be water tight and splash proof. Poly tanks are acceptable as long as they meet industry standards. Any open overhead fill shall be securely sealed (water tight). All tanks shall be equipped with a sight tube or automatic shut-off to prevent over filling tanks.
 - (2) The tank shall be attached to chassis frame or to a structurally sound flat bed in such a way to withstand pitch, roll and yaw of the load during on and off road operation of the unit without damaging the tank or other chassis components.
 - (3) Tank shall be labeled “GRAY WATER” with capacity in gallons shown conspicuously on each side of the tank in letters at least 4 inches high. Name,

city, and state of Contractor shall appear on both sides of the tank or on both truck cab doors in lettering at least 2 inches in height.

- (b) Pumps shall be constructed to prevent leakage, spillage, or splashing. On all diaphragm or similar types of open pumps, a tight metal hood shall be provided over the pump. Pumps may be either of the following:
 - (1) Vacuum pump system (Type GWV) Vacuum system that meets commercial vacuum truck specifications and requirements.
 - (2) Pump system (Type GWP) Standard commercial pumping system.
- (c) Discharge Gates or Valves shall be leak proof and constructed so as to discharge contents in a manner that will not create a nuisance. All inlets and outlets shall be provided with a cap to prevent dripping.
- (d) Hose. Minimum of 100 feet of hose shall be provided to pump contents from gray water holding tanks to truck tanks without spillage. Hoses are to be cleaned on premises without any spillage of contents on the ground. A 2 inch male and a 2 inch female camlock adapter are required to attach the pump truck to the storage tank. It is the responsibility of the Contractor to provide adapters and fittings that are industry acceptable for gray water disposal.
- (e) Racks shall be provided for carrying equipment on the truck. All parts of the truck and equipment shall be easily cleanable, with no pockets which can accumulate waste.
- (f) State or Local Certifications:
 - (1) Current State or Local Septic Tank, Cesspool, and Privy Cleaner License with counties listed where wastewater will be collected or equivalent for each state operating in.
 - (2) Current State or Local Septic Tank, Cesspool, and Privy Cleaner Vehicle Inspection or equivalent for each state operating in.
- (g) Dumping Sites. The host incident unit may designate the gray water dumping site; if not, the Contractor is required to identify an approved dumping site. The dumping site cost, if any, will be paid by the Government directly or by reimbursement to the gray water Contractor. A copy of the billing statement from the owner of the dumping site to the Contractor must be submitted to the Government if a Contractor requests reimbursement.

Additional Requirements for Gray Water Trucks

- (a) An audible reverse warning device (backup alarm) of 89 decibel or greater measured at 5 feet behind and in the center of the equipment.
- (b) A fire extinguisher, multi-purpose 2A 10BC that is securely mounted to the vehicle and accessible by the operator. The fire extinguisher shall have a current annual inspection tag and the annual maintenance tag in regards to a 6 year annual inspection and every 12 years regarding a hydro test on all dry powder, metal fire extinguishers.
- (c) Approved spark arrester on all naturally aspirated engines
- (d) Seat belts
- (e) Flashlight

Service trucks for pumping black water from portable toilet units may not be used for servicing and pumping gray water from wash stations units, bladder bags, or other holding tanks unless they are specifically designed for this use and have properly labeled compartmental units which meet all federal, state and local sanitation regulations.

PAYMENT

- (a) Double Shift - equipment is staffed with two operators or crews (one per shift). There will be no compensation for a double shift unless a separate operator is ordered in writing for the second shift. Agency personnel at the Section Chief level may, by resource order, authorize a second operator if needed during the assignment. Double shifts, when ordered, will be paid at 165% of the daily rate. (Not applicable to Trailer Mounted Handwashing Stations)
- (b) Daily Rate - Payment will be made on basis of calendar days (0001 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.

HANDWASHING STATION, TRAILER MOUNTED

Services for trailer mounted handwashing stations for use on a local, regional and nationwide basis. The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, trained/certified personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Equipment shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

- (a) Self-contained. The trailer mounted handwashing station must be self contained, to include a power source or generator for lighting and heating of water. The contractor shall keep units cleaned and fully stocked with paper towels and phosphate-free liquid soap.
- (b) Potable water shall be used for all wash basins, and comply with potable water truck standards listed above.
- (c) Minimum 250 gallons of potable water storage.
- (d) Wash Basins (Sinks)
 - (1) Units shall have a minimum of 8 wash basins (sinks) and with a mirror for each sink, or one solid mirror of sufficient length and height which provides viewing at each sink.
 - (2) All washbasins shall have adequate lighting for use of the wash basins in darkness.
 - (3) Minimum 500-gallon storage of gray water. Gray water disposal will be the responsibility of the Government.
 - (4) Each wash basin (sink) shall provide hot and cold water, shall control gray water, and shall have a minimum of one liquid soap dispenser and one enclosed paper towel dispenser for every two sinks. Each wash basin (sink) shall also have the ability to hold water with built in or permanently attached stoppers.
 - (5) Each wash basin shall provide hot water and cold water through a mixing faucet that allows for the washing of both hands while the water is running and have continuous hot water heating capable of maintaining up to 110° F.
 - (6) Contractor shall make provisions to prevent incident personnel from standing in water puddles, or mud on the ground, adjacent to the sinks.
- (e) Equipment Marking
 - (1) All bladder bags used shall have the size and use labeled on them in a conspicuous place in letters and numbers no less than 4 inches in height, (for example: 500 Gallons Gray Water).

- (2) All bladder bags must conform to NWCG specifications, to include testing and sanitization (for potable water).

All hoses used shall be labeled at both ends to identify their use (i.e. gray or potable).

Service trucks for pumping black water from portable toilet units may not be used for servicing and pumping gray water from wash stations units, bladder bags, or other holding tanks unless they are specifically designed for this use and have properly labeled compartmental units which meet all federal, state and local sanitation regulations.

PAYMENT

PAYMENT FOR HANDWASHING STATIONS WILL BE MADE AT THE RATE (DAILY, WEEKLY, MONTHLY) THAT IS MOST ADVANTAGEOUS TO THE GOVERNMENT. FOR PAYMENT PURPOSES, THE PAYMENT COMPUTATION WILL START OVER AFTER EACH 7 DAY PERIOD AND AFTER THE 30TH DAY FOR ANY PERIOD OF TIME UNDER HIRE.

HELICOPTER OPERATIONS SUPPORT TRAILER

Services for Helicopter Operations Support Trailers for use on a local, Regional and Nationwide basis. The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Helicopter Operations Support Trailer Specifications

1. Trailer: Minimum 26' length X 8.5' wide, excluding tongue. Two rooms with forced air to each room, separated by a door. Radio room with 180 degree windows for visibility. Pull down shades, no reflective tinted shades or window film to reduce sun glare.
2. Air Conditioning Unit(s): Two 15,000 BTU units, one for each room
3. Heating System: Commensurate with the internal dimensions, installed electric base board heaters or propane gas equivalent; no free standing heaters.
4. Trailer stabilizer.
5. Tool kit: Hand tool kit, for general use.
6. White boards: Three (3) each, 36" L X 24" H. one (1) installed in radio room and two (2) installed on each wall of the general work area room.
7. One (1) fax, copier, scanner, with one box of paper appropriate for the machine, for initial start up. One (1) high capacity printer.

8. Cork boards: Three (3) each: 36" L X 24" H; one (1) installed in radio room and two (2) installed on each wall of the general work area room.
9. Internal Lighting: Sufficient to provide adequate light for night time operations, refer to work station minimum requirements.
10. Exterior Lighting: Sufficient to provide adequate lighting for night time operations around the trailer and briefing area.
11. Steps: No steep steps, access shall allow safe entry/exit from the trailer.
12. Minimum of 1, 30 mph wind sock.
13. One (1) 10 BC and one (1) 20 BC Fire Extinguisher.

Work Space:

1. Work Stations: Three (3) each desktop/countertop work stations in radio room, and 4 more in work area large (can be continuous counter tops), seven (7) rolling chairs shall be provided.
2. If individual desk top work space provided dimensions shall be minimum 18" Deep by 36" long, per each work station, rolling chairs for each work station.
3. A minimum of one (1) each AC lighting fixture over each work area (florescent lighting is acceptable).

*NOTE: IF a trailer is longer, then the work space provided should be commensurate
with these minimum requirements for work space.

Electrical Power Requirements:

1. Minimum 120 Volt, 50 Amp AC service entrance with disconnect switch to master breaker.
2. AC receptacles at all work stations/areas.
3. One (1) each – 20 foot, 50 Amp, AC service extension cable.
4. AC – 3 pin Twist-Lock to standard 3 pin adapters (minimum 20 amp service).
5. Battery Backup: DC (battery) backup with a minimum of 100 AH capacity for initial start-up and power outages. Battery shall have capacity to power all radio equipment for at least one operational period (one shift).
 - a. Battery shall have a master disconnect or breaker switch.
 - b. Battery shall be physically isolated from work area for personnel safety.
 - c. Battery shall be a sealed, non-ventilating type, such as gel-cell.
6. Charging System: DC charging system to maintain battery backup.
*NOTE: A second smaller generator may be substituted for battery back-up that will
support all radio equipment.

7. Auxiliary Connection: Two (2) each Auxiliary 12 volt connection power points near radio equipment.
8. External Generator: One (1) each AC generator kit to include one (1) Whisper Quiet style generator with a minimum output capacity of 10,000 KVA, Capable of running for one operational period without refilling for fuel. Generator shall be positioned away from the trailer and have sound dampening material around it.

Radio and Electronic Equipment: **All VHF radio equipment must be P 25 digital compliant.**
(For additional information on fire approved radios, go to www.fs.fed.us/fire/niicd).

1. VHF BASE STATION: A minimum of three (3) each VHF fixed base radio(s) as required to cover the 148 – 174 MHz frequency band, FM, Narrowband capable, user programmable with a maximum transmitter power not to exceed 10 watts (such as Bendix King DPH mobile radio or equivalent).
2. UHF BASE STATION: A minimum of two (1) each UHF fixed base station radio or radios as required to cover the 406 – 420 MHz frequency bands. Radio(s) must be FM, Narrowband capable, User Programmable with a maximum transmitter power not to exceed 10 watts.
3. VHF AM BASE STATION: A minimum of two (2) each VHF AM fixed base station radio or radios as required to cover the 118 – 137 MHz frequency bands. User Programmable with a maximum transmitter power not to exceed 10 watts.
4. All fixed radio equipment shall be ready for immediate use upon arrival at the helibase, pending frequency programming.
5. The vendor shall provide: All radio frequency programming software and any necessary programming hardware.
6. Interface devices or personal computers required by the specific manufacturer make and model of radio equipment provided within the trailer unit.
7. All primary frequencies shall be on mobile radios with quality high gain or unity gain antennas. A standard Type 1 helibase would have 4-5 VHF FM frequencies and 1-3 VHF AM frequencies with the primary rotor AM transmitting back to the Helibase on a UHF frequency.
8. (2) AM and FM handheld radios.
9. ANTENNAS: One (1) each pre-connected, permanently mounted antenna tuned to the proper frequency band for each fixed radio. Antennas may be mast mounted or mounted directly to the trailer.
10. CABLES: Accessible cable runs in the walls to topside.
11. Public Address System
12. Timer or other time tracking device (10 ea).
13. Digital weather station located in Radio Office.

Telephone/Internet Services/Access

1. One (1) each telephone service/customer entrance panel to accommodate a minimum of three (3) telephone lines within the trailer.

2. Four (4) pre-wired RJ-11 with RJ-66 blocks phone jacks.
3. Four (4) pre-wired RJ-45 wall jacks.
4. Three (3) each telephone handsets. One near each work station or work area.
5. Satellite Internet or High Speed; including Service Provider.
6. Wireless LAN (recommended ports - 3).
7. Satellite telephone, one each, with service.

Training/Experience

The Contractor shall provide all operating supplies and one operator per shift. Each person employed by the Contractor under this Agreement shall meet the following minimum requirements:

1. Commercial Driver's License (CDL) with the appropriate endorsements and medical card valid for the state in which the operator resides.
2. All operators shall be able to operate the equipment safely up to the manufacturer's limitations.

PAYMENT

1. On-Shift includes time worked, time that resource is held or directed to be in a state of readiness, and compensable travel (resource traveling under its own power) that has a specific start and ending time.
2. **Daily Rate** - Payment will be made on basis of calendar days (0001 – 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.
PAYMENT WILL BE MADE AT THE RATE (DAILY, WEEKLY, MONTHLY) THAT IS MOST ADVANTAGEOUS TO THE GOVERNMENT. FOR PAYMENT PURPOSES, THE PAYMENT COMPUTATION WILL START OVER AFTER EACH 7 DAY PERIOD AND AFTER THE 30TH DAY FOR ANY PERIOD OF TIME UNDER HIRE.

MECHANIC SERVICE TRUCK

Services of Mechanics with Service Trucks for use on a local, Regional and Nationwide basis. The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, trained/certified personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Equipment shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

Type 1 - Heavy Construction/Logging Equipment (dozer, grader, excavator); Automotive, Light and Heavy Truck (Class 1-8); and Inspection and Diagnostic Services

1. Hydraulic pressure Testing kit
2. Charging/Starting System Analyzer
3. Code Reader (generic)
4. Arc welder - min. 225 amp with air arc capability and industry acceptable repair electrodes
5. Oxy/Acetylene torch set with appropriate cutting and welding tips
6. Air Compressor - Minimum of 120 PSI at 20 cfm with tank and appropriate accessories
7. 1/2, 3/4, & 1 inch drive impact wrenches and impact sockets to 3"
8. Hand tool set to accomplish normal field repairs on heavy construction equipment.
9. Jack stands – (2) 12 ton
10. Hydraulic Jacks (2) 12 ton
11. Vehicle or auxiliary powered portable lighting for field work.
12. Jumper Cables - 20 ft. heavy duty
13. Hazardous Material spill kit capable of containing and collecting a minimum of 10-gallons of spill.
14. Misc. drain pans
15. Combination Vise - minimum 4½-inch jaw
16. Knowledge and skills to perform hydraulic system repairs.
17. Hydraulic Crane (hand or powered) - min. 2 ton capacity
18. Battery Tester
19. Volt/Ohm meter
20. 1/2" drill w/bits to 3/4"
21. Fuel pressure testing kit
22. Tap & Die set to 1"
23. Electric Grinder 4"
24. Consumable goods (listed below)

Type 2 - Automotive, Light and Heavy Truck (Class 1-8) and Inspection and Diagnostic Services

1. Charging/Starting System Analyzer
2. Arc Welder
3. Oxy/Acetylene torch set with appropriate cutting and welding tips
4. Code Reader (generic)
5. Air Compressor - Minimum of 120 PSI at 12 CFM with tank and appropriate accessories
6. 1/2 & 3/4 inch impact wrenches and impact sockets to 2 inch
7. Hand tool set to accomplish normal field repairs on all classes of equipment SAE and metric
8. Jack stands (2) 2 ton and (2) 12 ton heavy duty
9. Hydraulic Jacks (2) 2 ton and (2) 12 ton heavy duty

10. Vehicle or auxiliary powered portable lighting for field work.
11. Jumper Cables - 20 ft. heavy duty
12. Hazardous Material spill kit capable of containing and collecting a minimum of 10-gallons of spill.
13. Misc. drain pans
14. Consumable goods (listed below)
15. Combination Vise - minimum 4 ½ inch jaw
16. Battery Tester
17. Volt/Ohm meter
18. Self-contained brake and clutch bleeder system
19. 3/8 drill w/ bits to 1/2"
20. Fuel pressure testing kit
21. Tap & Die set to 5/8"
22. Electric Grinder 4"

Consumable Goods

All mechanics (Types 1 and 2) shall provide the following consumable goods to enable the mechanic to operate independently for the first 24 hours and complete minor repairs. These consumables will not be replaced by the Government. Consumable parts shall be sorted by size and type in containers or trays.

1. Commonly used SAE and Metric Nuts and Bolts up to 1/2" x 3"
2. Assorted electrical connections for commonly used wire sizes on all equipment
3. Assorted sizes of electrical wire commonly found on all types of equipment
4. Assorted common electrical fuses and bulbs.
5. Assorted lubricants & cleaners commonly used in the industry by field mechanics (i.e. WD-40, brake cleaner, silicone sealant).
6. Assorted metal fasteners, machine screws, self-tapping up to #12 x 1 1/2"
7. Commonly used air brake fittings up to 5/8 inch.
8. Shop towels

Contractor shall be responsible for ensuring all personnel arrive at the incident with the proper Personal Protective Clothing and Equipment as prescribed in the agreement. Contractor shall be responsible for ensuring the Personal Protective Equipment is operable and maintained in good repair throughout the duration of any assignment. Personal Protective Clothing will be maintained in good repair, and be cleaned at sufficient intervals to preclude unsafe working conditions.

Contractor shall be responsible for ensuring that all personnel arrive with the following:

A. Personal Protective Equipment (PPE)

- (1) **BOOTS:** All Leather uppers, lace-up type, minimum of 8 inches high with lug type sole in good condition (steel toed boots are not acceptable), to be worn if working near the fireline.
- (2) **HARD HAT:** Hardhat meeting NFPA Standard 1977 is required.
- (3) **GLOVES:** One pair of heavy-duty leather per person.
- (4) **CHAPS:** One pair, welding
- (5) **EYE PROTECTION:** One pair (meets standards ANSI Z87, latest edition).
- (6) **HEARING PROTECTION:** Use hearing protection whenever sound levels exceed 85 dB.
- (7) **HEAD LAMP:** With batteries and attachment for hardhat.

B. Vehicles

1. Meet all State Motor Vehicle Requirements
2. Fire extinguisher, multi-purpose 1A 10BC that is securely mounted to the vehicle and accessible by the operator. The fire extinguisher shall have a current annual inspection tag and the annual maintenance tag in regards to a 6 year annual inspection and every 12 years regarding a hydro test on all dry powder, metal fire extinguishers.
3. An audible reverse warning device (backup alarm) of 87 db or greater when the transmission is put into reverse. The warning device shall face to the rear. Switches to activate the alarm will not be allowed.
4. Reflectors, triangles, bi-directional (one set of 3)
5. Two wheel chocks
6. Shovel

Training/Experience

1. Mechanic Types
 - a. Type 1 (Heavy Construction/Logging Equipment): Minimum 3 yrs. experience at the journeyman level on field repairs of heavy construction or logging equipment.
 - b. Type 2 (Automotive, Light and Heavy Truck): Minimum 3 yrs. experience at the journeyman level on all classes of light and medium trucks. DOT air brake qualifications (FMVCSA 49CFR 396.25)
2. Commercial Drivers License (when required).
3. All operators shall be able to operate the equipment safely up to the manufacturer's limitations (i.e., experience working in steep terrain, timber, etc.)
4. RT-130 Annual Fireline Refresher including fire shelter.

PAYMENT

- a. On-Shift includes time worked, time that resource is held or directed to be in a state of readiness, and compensable travel (resource traveling under its own power) that has a specific start and ending time.
- b. Daily Rate - Payment will be made on basis of calendar days (0001 _ 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.

MOBILE LAUNDRY

Laundry services for use on a local, Regional and Nationwide basis. The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Equipment shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

All laundry units shall be self-contained, including:

- All necessary fuel and power (Contractor may acquire fuel from the Government at the Incident rate per gallon).
- Generator, with a decibel rating no greater than 68 at 50 feet.
- All operating supplies (detergents, clean laundry bags, identification tags, etc)
- Continuous hot water supply, minimum 140° temperature
- Minimum 2000 gallons storage each of grey water and potable water
- Labor and equipment to transport, setup, maintain and operate the unit.
- Synthetic Heavy Duty Commercial Grade Detergent shall be use.(fatty based soaps should not be used on Nomex)
- Contractor may provide additional capability without an increase in the daily rate or payment of mobilization/demobilization (mileage) (Ref. D.21.7.3), or the government may order an additional unit from the dispatch priority list.

TYPE 1: Additional requirements for Type 1 unit

- Minimum production capability of 2500 pounds per day (Additional units may be provided by the Contractor to maintain production, (ref. D.21.7.3).
- The ability to clean laundry from multiple personnel in single loads (i.e., net-bagged laundry).

TYPE 2: Additional requirements for Type 2 unit

- Minimum production capability of 1500 pounds per day (Additional units may be provided by the Contractor to maintain production, (ref. D.21.7.3).

Scale

- Analog or Digital readout with one half (0.5) pound or less graduations with 25 pounds minimum weighing capacity.
- Basket with a minimum of capacity of 4680 cubic inches to facilitate the weighing of the laundry.
- Scale platform must be designed to hold the basket in a stable fashion when loaded with laundry.
- If not a commercially designed laundry scale with basket, scale must be calibrated to accommodate the tare weight of the basket.

Handling of Nomex (flame retardant clothing)

- Sort clothing to avoid staining of light-colored garments by dark-dyed garments. All Nomex shall be washed separately from all other clothing to prevent contamination from flammable lint.
- Synthetic, heavy-duty liquid laundry detergents are recommended for washing Nomex. Fatty-based soaps and chlorine bleach should not be used.
- Wash temperatures should be 140 degrees F, however wash temperatures up to 160 degrees F may be used for heavily soiled garments.
- All loads of Nomex shall receive at least 2 rinse cycles to assure all detergents are removed.
- Tumble dry at a medium or high temperature setting. To ensure maximum removal of wrinkles, tumble dryers should not be overloaded.
- Bulk Nomex from the supply unit shall be sorted by sizes and bundled for return to the Supply Unit. The Supply Unit will provide a waybill of Nomex presented to the Laundry Unit.

Receipt and Return of Laundry

- Laundry shall be weighed dry upon receipt from the customer.
- Contractor shall maintain a log documenting the customer's name, date and time the laundry was received, weight, and customer's signature, to help control loss and document turn around time. This log shall have a second signature block for the customer to sign upon receipt of the clean laundry.

- Laundry is to be returned to the customer, folded and packaged.
- After the first 48 hours at the incident, laundry must be completed and ready to return to the customer within 24 hours from time of receipt.
- At a minimum, laundry facilities shall be open and available to accept laundry, every day, from 0500 - 1000 and from 1700 - 2200.

Government Provided Services

- The Government will provide a supply of potable water and the disposal of grey water.

PAYMENT

- a. PAYMENT WILL BE MADE FOR THE DAILY RATE AND PRICE PER POUND.
 - i. DAILY RATE - Payment will be made on basis of calendar days (0001 - 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.
 - ii. WORK RATE
 - 1) Per Pound - Payment will be made for actual pounds of laundry (rounded up to the nearest pound, processed by the Contractor.
 - 2) Mileage - Shall apply when equipment is under hire as ordered by the Government, and being mobilized/demobilized from an incident

POTABLE WATER TRUCK

Services for potable water trucks for use on a local, regional and nationwide basis. The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, trained/certified personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Equipment shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

Equipment Typing

- Type 1 – 4000+ gallons
- Type 2 – 2500-3999 gallons
- Type 3 – 1000-2499 gallons

- Type 4 – 400-999 gallons

Equipment Requirements

(a) Potable water tanks shall be:

- (1) Used exclusively for drinking water. Do not use containers for any non-food products. The potable water system, including filling hose and lines, pumps, tanks, and distributing pipes, shall be separate and distinct from other water systems. Do not use containers that have ever been previously used for gray water, toxic or bio-hazardous substances. (Reference: Code of Federal Regulations, Title 21, Section 129.40)
- (2) Clearly and conspicuously labeled with the words “POTABLE” or “FOR DRINKING WATER USE ONLY” on both sides of the tank in lettering at least 4 inches in height. The capacity of the tank (in gallons) displayed on both sides of the tank or on both cab doors in lettering at least 2 inches in height. Name, city, and state of Contractor shall appear on both sides of the tank or on both truck cab doors in lettering at least 2 inches in height. A seal or sticker provided by the State or local authority shall be affixed to the upper left quarter of the rear of the tank or other location if specified by the issuing agency and shall be visible at all times indicating that the tank has been inspected, certified and found to be in compliance with State requirements. If stickers are not provided by a State, a copy of the certificate or label shall be kept in the transport vehicle at all times. An annual inspection and certification of the tank by the local health authority is required. In addition, the carrier shall meet all laws and regulations for hauling on public roads. If the tank is part of the transport vehicle, then both the tank and vehicle shall meet State requirements, and the appropriate inspection and certification will be maintained for the vehicle.
- (3) All trucks must comply with local certification process.
- (4) Four Hundred (400) gallons capacity or greater and be made of non-toxic, non-corrodible/non absorbent materials or coated with non-toxic coatings National Safety Foundation (NSF) International Standard 61 that can be adequately cleaned and sanitized. Examples are stainless steel, food contact plastics (polyethylene), and food contact epoxy coatings. Surfaces that come in contact with water shall be smooth, without pits, dents, or crimps that may hold contaminating matter and welds shall be of non-corrosive material.

(b) Tank Construction. Tanks shall be constructed to the following requirements at a minimum and meet all State requirements for certification compliance if the State has these established:

- (1) **Openings:** Hatches and other openings shall be completely covered and sealed with tight fitting coverings, permanently mounted food-grade gaskets, and security locks. Water inlets and outlets shall be equipped with threaded or clamped caps, tethered to the ports with chain or cable. Inlet and outlet caps shall be in place on all fittings except when water is being discharged or loaded.
- (2) **Tank vents:** Vents will be designed to prevent water contamination. Tanks shall be vented by a downward facing, or otherwise protected vent opening of a sufficient size to allow air to replace water as it is discharged. This opening shall be protected by an appropriate screen as required in the state that certifies the equipment.
- (3) If a State does not certify the equipment, the screen shall be made from non-toxic, non-absorbent material.
- (4) **Drain:** Each potable water tank shall provide a means of drainage and, if it is equipped with a manhole, overflow, vent, or a device for measuring depth of water, provision shall be made to prevent entrance into the tank of any contaminating substance. No deck or sanitary drain or pipe carrying non-potable water or liquid shall be permitted to pass through the tank. A bottom drain shall be provided to facilitate complete discharge of water during sanitation procedures.

(c) Tank Filling Mechanisms

- (1) There shall be no backflow or cross connection between potable water systems and any other systems. Pipes and fittings conveying potable water to any fixture, apparatus, or equipment shall be installed in such a way to prevent backflow. Waste pipes from any part of the potable water system, including treatment devices, discharging to a drain, shall be suitably protected against backflow. Either of the following methods may be used:
 - a. An approved backflow prevention device complying with Uniform Plumbing Codes 603.3.1, 2, 3, 4, 5 and 8 such as acceptable double check valves on the direct filling connection to the tank. No connections shall be located between the tank and the check valve.
 - b. Overhead filling through a hatch opening at the top of the tank; the filling spout must not be allowed to intrude into the tank further than two

diameters of the filling pipe above the highest water level that is possible when the tank is filled. If an overhead filler pipe is mounted on the vehicle, when not being used for filling, this pipe shall be capped at each end with threaded or clamped caps, and tethered to the fittings at the ends of the filler pipe.

- (2) Sanitary techniques must be observed in the water transfer operation. Care must be exercised to prevent foreign materials from entering the water. Since contamination could be present on the exterior surfaces of hoses or pipes, they must never be submerged in a receiving vessel. Adequate cleaning and sanitizing procedures shall be used on hauling vehicle(s) and associated equipment at the following times:
 - a. When the equipment is placed into service, or when it has been unused and stored in a sealed condition for a period of 4 weeks or more.
 - b. When the filled or empty tank has been exposed by open or unsealed cover caps or fittings to any condition of possible contamination of the tank or contents, including contact with dust, smoke, rain, or chemical substances.
 - c. When any fault or defect becomes apparent in the seals, vents, hatch doors, welds, valves, pipes, pumps, hoses or other equipment that may contaminate the water.
 - d. When bacterial analysis of the water indicates presence of coliform bacteria.

(d) Pumps

- (1) The potable water/food-grade pump shall have the capacity to transfer potable water a minimum of twenty (20) feet vertical.
- (2) Only water transfer pumps which can be readily disassembled to demonstrate the condition of the impeller and impeller chamber shall be used. Internal pump water contact surfaces, including seals, bearing, and lubricants must be constructed from food grade materials and must be smooth, non-porous, and corrosion resistant and use acceptable food grade lubricants. Manufacturer's data stating the pump is food grade (NSF 61) shall be made available to the Government upon request.

(e) Hoses

- (1) Hoses shall have a smooth interior surface made of food-grade standard materials or materials meeting NSF International Standard 61. Pumps, hoses, fittings, valves and similar equipment shall be made of food-grade materials or materials meeting NSF International Standard 61 and shall be kept clean, disinfected and operated or handled in a manner that prevents contamination and capped or closed when not in use. Hoses shall be marked/labeled “potable water” and the use of galvanized pipes or fittings is prohibited.
- (2) The ends of all hoses shall be provided with threaded or clamped caps. Such caps shall be in place when hoses are not in use. Hoses in storage compartments must also be capped.

(f) Operational Requirements and Bacterial Testing

- (1) Hauled water is vulnerable to increased handling, diversity of source, variability in hauling equipment, and shall not be stored in the vehicle for a period greater than one week. All hauling equipment must be clean and in good condition. In addition, all water-contact surfaces in hauling and storage facilities shall be disinfected prior to use.
- (2) All equipment surfaces intended for potable water contact, including source fill point equipment, containers, caps, tanks, hoses, valves, and fittings shall be inspected, washed, rinsed, sanitized, and replaced as often as necessary to effect and maintain sanitation of such surfaces. Procedures to be used are listed in Title 21, Code of Federal Regulations, Part 129.80. Disinfection needs to occur before being put in service, or when it has been unused and stored in a sealed condition after a period of 4 weeks or more, or after any food product has been hauled. Follow applicable State specifications/guidelines for disinfection of tanks either where the equipment was certified or to the standards where the equipment is going to be used if crossing state boundaries. When no applicable State specifications/guidelines for disinfection of tanks exist, at a minimum, the tank shall be thoroughly cleaned and disinfected. After 24 hours contact time with the disinfecting solution, the tank shall be drained and flushed with drinking water. Written procedures for equipment cleaning and sanitizing shall be maintained by the Contractor and shall be kept with the hauling vehicle at all times. These procedures shall include the names, amounts, and contact times of cleaning and sanitizing agents to be used. The frequency of equipment cleaning and sanitizing must be tracked in a log to be kept with the vehicle at all times. A copy of the Contractor’s equipment cleaning and sanitizing procedures log shall be provided to the Contracting Officer or designated Government Representative upon request.

(3) At a minimum or when required by the local jurisdiction or State Law one microbiological test for total coliform shall be performed within 2 established business days of the time of arrival at the incident at a certified laboratory. Sampling by the contractor must be performed to industry standards and to the standards required by the designated laboratory. The sample to be tested shall be obtained at the time of arrival at the incident. Where State-specific requirements have not been established, laboratory coliform test data must show that the water contains coliforms of less than 2.2 Most Probable Numbers (MPN)/100 ml (or “absence” if the presence/absence test is used). In addition, a test shall be performed on the first water load following any of the required sanitation procedures, whenever switching to a different water source and/or at least once every 30 days during months when water hauling is performed, and/or whenever such analysis is requested by state or local health authorities or Government representative. If the presence/absence (P&A) test for the coliform analysis is used, then only negative (absence) results are acceptable. If a sample tests positive (presence), the Contractor shall take out of service, investigate the cause of the problem; take corrective actions; resample/test the water; and notify the Incident Commander or designated Government Representative at the Incident. If the test data shows that the water contains more than 2.2 MPN/100 ml, the Contractor shall immediately take out of service; investigate the cause of the problem; take corrective actions; resample/test the water; and notify the Incident Commander or designated Government Representative at the Incident. The Contractor shall not haul water until the test shows that the water contains total coliform of less than 2.2 MPN/100 ml. Copies of the results of such tests shall be submitted to the Contracting Officer at the address indicated on the agreement or contract within seven calendar days after the end of the incident assignment. Test results shall clearly identify Contractor’s name, address, and contract or agreement number on the report. Original laboratory test results shall be maintained by the Contractor and kept for at least 2 years pursuant to Title 21, Code of Federal Regulations, Part 129.80. Failure to comply with this requirement may result in the immediate cancellation or suspension of the Agreement. The Incident commander or designated Government Representative at the Incident with concurrence of the Contracting Officer will determine if/when the Contractor will be available for service.

(4) Tank shall arrive empty for inspection.

(5) Chlorine Residual: Contractors shall maintain a free chlorine residual level of 0.2 parts per million (ppm) up to 1.0 ppm at all times (1/3 cup of bleach that meets NSF standards to 1000 gallons water may achieve 1.0 ppm chlorine

residual level). When residual levels drop below required levels the load shall be dumped and tank refilled.

(6) Contractors shall have chlorine residual test kits available at all times and test for free chlorine residual levels when:

- a. Loading drinking water for transport,
- b. After adding any disinfectant, if the addition of disinfectant is necessary;
- c. When unloading; and
- d. Every 24 hours the water is in use (provide with daily use documentation).

(7) Maintain records of activities on board the vehicle showing water source location, dates, and times of loading, unloading, chlorine residual test results, cleaning/sanitizing, and other operational items as deemed necessary. Copies of bacterial analysis test results and all agreements, contracts, licenses, etc. shall be maintained on board the vehicle at all times. Contractor will provide copies of these records to the Incident Commander or designated Government Representative.

(8) Failure of the contractor to perform the required testing at the times specified is grounds for immediate termination of an agreement.

(g) Water Sources

(1) The host incident unit will designate the water source.

(2) Use only potable water from a permitted private or public (municipal or community system) drinking water supply. Filling must be accomplished using acceptable source water under pressure. Drafting of surface water is not allowed under any circumstances. The cost, if any, will be paid by the Government directly or by reimbursement to the potable water truck contractor. A copy of the billing statement from the owner of the water source to the contractor must be submitted to the Government if a contractor requests reimbursement.

(h) Government or Contracting Agency Testing

(1) The Government or contracting agency may, at its option, perform random testing. The contractor shall provide reasonable access to all potable water tanks and apparatuses to the Government or contracting agency.

(i) Accessibility

- (1) Each truck shall be accessible to individuals for filling canteens or other water containers (either mounted on the truck or a separate stand). It shall have a minimum of seven (7) valved outlets (capable of flowing 3 gpm each); evenly spaced on a minimum 1-1/2" pipe. All materials used for plumbing the canteen filling stations must be constructed of food grade materials or acceptable metal (brass, aluminum, stainless steel, or copper). Must have effective backflow prevention (check valves), and dispensing spouts or hose bibs (threaded faucets require vacuum breakers).

All potable water and gray water vehicles shall have:

- (a) An audible reverse warning device (backup alarm) of 89 decibel or greater measured at 5 feet behind and in the center of the equipment.
- (b) A fire extinguisher, multi-purpose 2A 10BC that is securely mounted to the vehicle and accessible by the operator. The fire extinguisher shall have a current annual inspection tag and the annual maintenance tag in regards to a 6 year annual inspection and every 12 years regarding a hydro test on all dry powder, metal fire extinguishers.
- (c) Approved spark arrester on all naturally aspirated engines
- (d) Seat belts
- (e) Flashlight

No potable or gray water truck shall exceed the manufacturer's GVWR or Gross Axle Weight Rating (GAWR) per axle when the vehicle is fully loaded and equipped. The vehicle GVWR plate should be on the driver's side doorpost, driver's door, or in the glove compartment. If missing or illegible, the Contractor shall provide a GVWR certificate from manufacturer stating front, rear and total GVWR at the pre-season and incident inspections. Only a written verifiable GVWR from the manufacturer or final stage manufacturer will be accepted. Vehicles without GVWR and GAWR ratings will be rejected at the pre-award inspection and will have to reschedule another regular inspection time and/or location when certification is acquired.

Tanks which exceed the GVWR or GAWR of the vehicle when fully loaded shall have a site gauge (does not apply to vacuum trucks) which shows the amount of water that can be contained in the tank to meet the manufacturer's GVWR and GAWR (temporary fillers or spacers not allowed). **Tank capacity shall be permanently modified to meet manufacturer's GVWR and GAWR and overflow devices shall not be allowed after January 1, 2010.**

PAYMENT

- (a) Double Shift - equipment is staffed with two operators or crews (one per shift). There will be no compensation for a double shift unless a separate operator is ordered in writing for the second shift. Agency personnel at the Section Chief level

may, by resource order, authorize a second operator if needed during the assignment. Double shifts, when ordered, will be paid at 165% of the daily rate. (Not applicable to Trailer Mounted Handwashing Stations)

- (b) Daily Rate - Payment will be made on basis of calendar days (0001 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.

TRANSPORTS

The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, trained/certified personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Equipment shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

Equipment Typing

- Type 3 - rated at loads up to 35,000 lbs.
- Type 2 - rated at loads 35,001 to 69,999 lbs.
- Type 1 - rated at loads over 70,000 lbs.

Equipment Requirements

1. An audible reverse warning device (backup alarm) of 87 decibel or greater measured at 5 feet behind and in the center of the equipment.
2. A fire extinguisher, multi-purpose 2A 10BC that is securely mounted to the vehicle and accessible by the operator. The fire extinguisher shall have a current annual inspection tag and the annual maintenance tag in regards to a 6 year annual inspection and every 12 years regarding a hydro test on all dry powder, metal fire extinguishers.
3. Shovel
4. US Forest Service-qualified spark arrester on all naturally aspirated engines
5. All factory guards shall be in place and in functional condition (i.e. engine compartment) (applicable for heavy equipment)
6. Radiator protection (applicable for heavy equipment)
7. Seat belts
8. Flashlight
9. Water, 1 gal drinking
10. 5-person first aid kit

11. Personal Protective Equipment. Contractor shall be responsible for ensuring all personnel arrive at the incident with the proper Personal Protective Clothing and Equipment as prescribed in the agreement. Contractor shall be responsible for ensuring the Personal Protective Equipment is operable and maintained in good repair throughout the duration of any assignment. Personal Protective Clothing will be maintained in good repair, and be cleaned at sufficient intervals to preclude unsafe working conditions. All personnel shall be wearing Personal Protective Clothing, including boots, upon arrival at the incident.

Contractor shall be responsible for ensuring that all personnel arrive with the following:

Personal Protective Equipment (PPE)

- (1) BOOTS: All Leather uppers, lace-up type, minimum of 8 inches high with lug type sole in good condition (steel toed boots are not recommended).
- (2) HARD HAT: Hardhat meeting NFPA Standard 1977 is required.
- (3) GLOVES: One pair of heavy-duty leather per person.
- (4) EYE PROTECTION: One pair (meets standards ANSI Z87, latest edition).
- (5) HEARING PROTECTION: Use hearing protection whenever sound levels exceed 85 dB. Earphones (headset) required with radio shall have built-in hearing protection.
- (6) HEAD LAMP: With batteries and attachment for hardhat.

NOTE: It is recommended that fireline personnel wear a short-sleeved t-shirt, underwear, and socks under fire clothing and boots. T-shirts and underwear should be 100% cotton or a 100% flame resistant blend of fibers. Socks should be cotton, wool, or a blend of flame resistant fibers.

Training/Experience

1. RT-130 Annual Fireline Refresher including fire shelter.
2. Commercial Drivers License (for transports, when required).
3. All operators shall be able to operate the equipment safely up to the manufacturer's limitations (i.e., experience working in steep terrain, timber, etc.)

Additional Requirements for Transports

Heavy equipment transport operators are responsible for following Department of Transportation (DOT) standards while in transit and adhere to legal weights, laws and limits pertaining to the transport of heavy equipment while under hire. Transport operators may

be required to transport loads of up to the maximum GVWR rating of the tractor-trailer combination on steep, poorly maintained roads. Operators should expect to drive on secondary roads with grades of up to 15 percent, with close radius switchbacks and road surfaces of natural material. Truck and trailer shall be capable of working on secondary Forest/Range roads with adequate tractor horsepower and trailer clearance to excel in this environment. Operators may haul dozers, road graders excavators and logging equipment while under hire and must understand load securement and tractor-trailer limitations. Operator is responsible for meeting all State requirements, such as weight restrictions and hauling permits. All special permits are the responsibility of the Operator.

If transporting equipment as a for hire motor carrier, all transports shall have Carrier Insurance as required by 49 CFR 387 (Minimum levels of responsibility for motor carriers) and have Cargo Insurance commensurate with the types of cargo that is being hauled.

TRANSPORTATION

Transports shall have current Department of Transportation (DOT) certification and be of sufficient and legal weight rating to transport the equipment.

Contractor is responsible for:

- a. Meeting all state and federal requirements, such as weight restrictions and hauling permits;
- b. All special permits;
- c. Providing all pilot cars when required by a permitting agency;
- d. A valid fleet insurance policy information card issued by an insurer;
- e. A valid insurance declaration page;
- f. A written insurance binder issued by the same agent as parent insurance.

Equipment under the direction of incident management personnel may not be unloaded immediately. The Contractor is responsible for all costs associated with the transport until the equipment is unloaded and the transport is released. The transport may be retained at the incident for the sole purpose of transporting the equipment that was originally ordered; the minimum daily guarantee will be paid until the transport is released. This must be documented on the shift ticket and in the Incident Action Plan. If there is no Incident Action Plan (i.e., smaller incidents) approval by the Incident Commander is acceptable. If the contractor elects to keep the transport at the incident location after it is released by the government, no payment will be made.

PAYMENT

- a. On-Shift includes time worked, time that resource is held or directed to be in a state of readiness, and compensable travel (resource traveling under its own power) that has a specific start and ending time.
- b. MINIMUM DAILY GUARANTEE - For any time under hire for at least 8 hours, the government will pay no less than the minimum daily guarantee, or the mileage rate, whichever is greater. If a resource is under hire for less than 8 hours during a calendar day, the amount earned for that day will not be less than one-half the minimum daily guarantee. HEAVY EQUIPMENT THAT HAS ONE OPERATOR FOR THE TRANSPORT AND THE HEAVY EQUIPMENT WILL BE PAID AT 65% OF THE RATE FOR THE TRANSPORT - MINIMUM DAILY GUARANTEE.
- c. MILEAGE - Payment shall be made for the mileage rate or minimum daily guarantee, whichever is greater.

VEHICLE WITH DRIVER

Services for vehicles with drivers for use on a local, Regional and Nationwide basis. The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Equipment shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

Contractor Provided Equipment

- Vehicles shall be equipped with a spare tire, wheel wrench, jack, and fire extinguisher (2A 10BC).
- Adequate insurance for a commercial operation.
- All vehicles shall be configured to the manufacturer's original specifications.
- Modifications to vehicles that may result in the vendor not being awarded an agreement would be lift kits, aftermarket exhaust (i.e., glass packs), and other such modifications that would compromise the integrity of the vehicle.

Government Provided Equipment

Personal Protective Equipment – The government considers operators as fireline personnel who will use and wear specified articles of personal protective equipment. The following

mandatory items will be issued by the Government, when not furnished by the Contractor, to operators performing within the scope of this agreement.

- a. Clothing: (1) Flame resistant pants and shirts; (2) Gloves (Either Nomex or chrome tanned leather, when not furnished by the contractor); (3) Hard hat; (4) Goggles or safety glasses.
- b. Equipment: (1) Fire shelter; (2) Headlamp; (3) Individual First-Aid Kit; (4) Other items, in addition to these three may be issued by the Government.

Operators shall wear the items of clothing issued and maintain the issued equipment in a usable and readily available condition. Upon completion of the contract assignment, all issued items of clothing or equipment shall be returned to the Government. Deductions will be made for all Government furnished protective equipment not returned by the government.

Mileage

In addition to the daily rate a mileage rate will be paid.

Training/Experience

1. One operator shall be provided, and must maintain a valid state driver's license.
2. All operators are required to have RT-130 Annual Fire Refresher including fire shelter.*
3. The operator's health and physical condition must be sufficient to perform the duties of driver without causing anyone undue hazard. Please specify any physical limitations that may influence your work activities in writing to the Contracting Officer.
4. All operators shall be able to occasionally lift objects up to 30 pounds.
5. All operators shall be able to operate the equipment safely up to the manufacturer's limitations.

*Nomex and PPE will be provided by the Government.

PAYMENT

- a. On-Shift includes time worked, time that resource is held or directed to be in a state of readiness, and compensable travel (resource traveling under its own power) that has a specific start and ending time.
- b. **Daily Rate** - Payment will be made on basis of calendar days (0001 – 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.

- c. **Mileage** – Shall apply when equipment is under hire as ordered by the Government.

WATER TENDER (SUPPORT)

Services for Support Water Tenders for use on a local, Regional and Nationwide basis. The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Equipment (vehicle, tank, pump, accessories, and equipment complement) shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

Equipment Typing

MINIMUM STANDARDS SUPPORT WATER TENDERS			
TYPE	1	2	3
REQUIREMENTS			
Tank Capacity (gallons)	4000	2500	1000
Minimum	NONE	3999	2499
Maximum			
Pump Minimum Flow (gpm)	300	200	200
@ rated pressure (psi)	50	50	50
Spray Bar or Equivalent*	Yes	Yes	Yes
Maximum Refill Time (minutes)	30	20	15
Drafting Capabilities	Yes	Yes	Yes
MAY USE PORTABLE PUMP THAT MEETS MINIMUM STANDARDS			
Personnel (minimum)	1	1	1

***Spray bar or equivalent that operates with a pump, PTO or gravity fed on front and/or rear of water tender**

Equipment Requirements

- In addition to these requirements, engines and tenders shall meet all State Motor Vehicle Requirements.
- An audible reverse warning device (backup alarm) of 87 decibel or greater measured at 5 feet behind and in the center of the equipment.

- Vehicles that have emergency lights may not use them when performing work under this Agreement unless directed in writing by the Incident Commander to do so.
- Tow-behind units are not acceptable for Engines or Tactical Water Tenders.
- No engine or water tender shall exceed the manufacturer's Gross Vehicle Weight Rating (GVWR) or Gross Axle Weight Rating (GAWR) per axle when the vehicle is fully loaded and equipped. **Fillers, spacers, and overflow devices to reduce the overall capacity of the tank shall not be allowed.** The vehicle GVWR plate should be on the driver's side doorpost, driver's door, or in the glove compartment. If missing or illegible, the Contractor shall provide a GVWR certificate from manufacturer stating front, rear and total GVWR for the incident inspection. Only a written verifiable GVWR from the manufacturer or final stage manufacturer will be accepted.
- Baffling. The water tanks shall be equipped with partitions that reduce the shifting of the water load. Free Floating Baffle System - baffles which reduce the shifting of the water load AND do not compromise the structural integrity of the originally manufactured tank are acceptable. If a Free Floating Baffle System is used the vendor must submit data sheets which validates that the baffling is sufficient to meet the manufacturer's recommendation. All tanks shall comply with one (1) longitudinal baffle regardless of width and one (1) transverse baffle at a minimum of every 52". All baffles must cover 75% of the plane of the tank.
- Pump:
 - The tank shall be attached to chassis frame or to a structurally sound flat bed in such a way to withstand pitch, roll and yaw of the load during on and off road operation of the unit without damaging the tank or other chassis components.
 - The pump may be an auxiliary powered pump or a power take-off pump. All pumps shall have a discharge pressure gauge. If the pump is of the positive displacement type, a bypass or pressure relief valve shall be provided. The pump shall meet minimum capabilities for the type of Contract Equipment as designated in Section D of this specification and Exhibit M.
 - The pump, as mounted, shall be capable of drafting water from a water source located 10 feet vertical distance below the pump head through the required 20 feet of suction hose. The Contractor may substitute a portable pump capable of meeting the fill times identified for that particular type of equipment.
- All equipment inventory shall be permanently marked with vendor/company identification. In addition, the vendor is to maintain a complete inventory list, including any extra items they may be carrying.
- A fire extinguisher, multi-purpose 2A 10BC that is securely mounted to the vehicle and accessible by the operator. The fire extinguisher shall have a current annual inspection tag and the annual maintenance tag in regards to a 6 year annual inspection and every 12 years regarding a hydro test on all dry powder, metal fire extinguishers.
- Approved spark arrester on all naturally aspirated auxiliary engines
- Seat belts

- Flashlight
- Line gear shall be provided for contractor personnel to perform incident duties away from engine/tactical water tenders.
- Personal Protective Equipment. Contractor shall be responsible for ensuring all personnel arrive at the incident with the proper Personal Protective Clothing and Equipment as prescribed in the agreement. Contractor shall be responsible for ensuring the Personal Protective Equipment is operable and maintained in good repair throughout the duration of any assignment. Personal Protective Clothing will be maintained in good repair, and be cleaned at sufficient intervals to preclude unsafe working conditions. All personnel shall be wearing Personal Protective Clothing, including boots, upon arrival at the incident.

Contractor shall be responsible for ensuring that all personnel arrive with the following:

Personal Protective Equipment (PPE)

- (1) BOOTS: All Leather uppers, lace-up type, minimum of 8 inches high with lug type sole in good condition (steel toed boots are not recommended).
- (2) HARD HAT: Hardhat meeting NFPA Standard 1977 is required.
- (3) GLOVES: One pair of heavy-duty leather per person.
- (4) EYE PROTECTION: One pair (meets standards ANSI Z87, latest edition).
- (5) HEARING PROTECTION: Use hearing protection whenever sound levels exceed 85 dB. Earphones (headset) required with radio shall have built-in hearing protection.
- (6) HEAD LAMP: With batteries and attachment for hardhat.

Additional Requirements for Support Water Tenders

- All three-axle water tenders shall have a GVWR and GAWR capable of handling 2500 gallons.
- All water tenders shall have a minimum of a 4" gravity dump valve located on the rear of the tank capable of dumping 90 % of the tanks contents into a standard folding tank. The valve shall be plumbed to allow the flow of water over any rear bumper protection into the folding tank.

Minimum Tender Inventory

- 1 – Handheld Programmable Radio
- 1 – Nozzles, comb fog/straight stream, 1 ½" NH Female
- 1 – Reducer, 1 ½" NH female to 1" NPSH Male
- 1 – Shovels, size 0 or 1
- 1 – Pulaskis
- 1 – Spanner Wrench, combination 1 ½" to 2 ½ "
- 1 – Adjustable Hydrant Wrench
- 2 – Adapters 1 ½" NPSH Female to 1 ½" NH Male

2 – Adapters 1 ½” NH Female to 1 ½” NPSH Male
2 – Reducers 2 ½” NH Female to 1 ½” NH Male
1 – Double Male 1 ½” NH
1 – Double Female 1 ½” NH
1 – Gated Wye 1 ½” NH
1 – Fire Hose Clamp 2 ½”
100’ – 1 ½” cotton/synthetic hose NH thread
50’ – 2 ½” cotton/synthetic hose NH thread
Reflective Triangles, bi-directional, set of 3
Fire Extinguisher, 1 rated at 2A 10BC or better
1 – First Aid Kit (5 person)
2 – each Wheel chocks (see Definitions)
1 – each Portable Hand Lights
Seat Belt for all passengers
Minimum 4” Dump Valve at bottom of tank (min. 34” from ground)
Tires minimum 4/32” tread, front and rear
Back up Alarm (87 Decibels measured at 5 feet) & back up lights (2)

Training/Experience

- (1) RT-130 Annual Fireline Refresher including fire shelter
- (2) Commercial Drivers License, when required.
- (3) All operators shall be able to operate the equipment safely up to the manufacturer’s limitations.

PAYMENT

- a. **Double Shift** equipment is staffed with two operators or crews (one per shift). There will be no compensation for a double shift unless a separate operator is ordered in writing for the second shift. Agency personnel at the Section Chief level may, by resource order, authorize a second operator if needed during the assignment. Double shifts, when ordered, will be paid at 165% of the daily rate.
- b. **Daily Rate** - Payment will be made on basis of calendar days (0001 – 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.

WATER TENDER (TACTICAL)

Services for Tactical Water Tenders for use on a local, Regional and Nationwide basis. The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, personnel, and supervision and management of those personnel, necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Equipment Typing

MINIMUM STANDARDS TACTICAL WATER TENDERS			
	TYPE	1	2
REQUIREMENTS			
Tank Capacity (gallons)		2000	1000
Minimum		NONE	1999
Maximum			
Pump Minimum Flow (gpm)		250	250
@ rated pressure (psi)		150	150
Hose (feet)		100	100
Live Hose Reel $\frac{3}{4}$ " ID			
Spray Bar or Equivalent*		Yes	Yes
Pump and Roll		Yes	Yes
Foam Proportioner System		Yes	Yes
Drafting Capabilities - MAY USE PORTABLE PUMP THAT MEETS MINIMUM STANDARDS		Yes	Yes
Personnel (minimum)		2	2

***Spray bar or equivalent that operates with a pump, PTO or gravity fed on front and/or rear of water tender**

Equipment Requirements

- In addition to these requirements, engines and tenders shall meet all State Motor Vehicle Requirements.
- An audible reverse warning device (backup alarm) of 87 decibel or greater measured at 5 feet behind and in the center of the equipment.
- Vehicles that have emergency lights may not use them when performing work under this Agreement unless directed in writing by the Incident Commander to do so.
- Tow-behind units are not acceptable for Engines or Tactical Water Tenders.
- No engine or water tender shall exceed the manufacturer's Gross Vehicle Weight Rating (GVWR) or Gross Axle Weight Rating (GAWR) per axle when the vehicle is fully loaded and equipped. **Fillers, spacers, and overflow devices to reduce the overall capacity of the tank shall not be allowed.** The vehicle GVWR plate should be on the driver's side doorpost, driver's door, or in the glove compartment. If missing or illegible, the Contractor shall provide a GVWR certificate from manufacturer stating front, rear and total GVWR for the incident inspection. Only a written verifiable GVWR from the manufacturer or final stage manufacturer will be accepted.

- Baffling. The water tanks shall be equipped with partitions that reduce the shifting of the water load. Free Floating Baffle System - baffles which reduce the shifting of the water load AND do not compromise the structural integrity of the originally manufactured tank are acceptable. If a Free Floating Baffle System is used the vendor must submit data sheets which validates that the baffling is sufficient to meet the manufacturer's recommendation. All tanks shall comply with one (1) longitudinal baffle regardless of width and one (1) transverse baffle at a minimum of every 52". All baffles must cover 75% of the plane of the tank.
- Pump:
 - The tank shall be attached to chassis frame or to a structurally sound flat bed in such a way to withstand pitch, roll and yaw of the load during on and off road operation of the unit without damaging the tank or other chassis components.
 - The pump may be an auxiliary powered pump or a power take-off pump. All pumps shall have a discharge pressure gauge. If the pump is of the positive displacement type, a bypass or pressure relief valve shall be provided. The pump shall meet minimum capabilities for the type of Contract Equipment as designated in Section D of this specification and Exhibit M.
 - The pump, as mounted, shall be capable of drafting water from a water source located 10 feet vertical distance below the pump head through the required 20 feet of suction hose. The Contractor may substitute a portable pump capable of meeting the fill times identified for that particular type of equipment.
- All equipment inventory shall be permanently marked with vendor/company identification. In addition, the vendor is to maintain a complete inventory list, including any extra items they may be carrying.
- A fire extinguisher, multi-purpose 2A 10BC that is securely mounted to the vehicle and accessible by the operator. The fire extinguisher shall have a current annual inspection tag and the annual maintenance tag in regards to a 6 year annual inspection and every 12 years regarding a hydro test on all dry powder, metal fire extinguishers.
- Approved spark arrester on all naturally aspirated auxiliary engines
- Seat belts
- Flashlight
- Line gear shall be provided for contractor personnel to perform incident duties away from engine/tactical water tenders.
- Personal Protective Equipment. Contractor shall be responsible for ensuring all personnel arrive at the incident with the proper Personal Protective Clothing and Equipment as prescribed in the agreement. Contractor shall be responsible for ensuring the Personal Protective Equipment is operable and maintained in good repair throughout the duration of any assignment. Personal Protective Clothing will be maintained in good repair, and be cleaned at sufficient intervals to preclude unsafe working conditions. All personnel shall be wearing Personal Protective Clothing, including boots, upon arrival at the incident.

Contractor shall be responsible for ensuring that all personnel arrive with the following:

Personal Protective Equipment (PPE)

- (1) BOOTS: All Leather uppers, lace-up type, minimum of 8 inches high with lug type sole in good condition (steel toed boots are not recommended).
- (2) HARD HAT: Hardhat meeting NFPA Standard 1977 is required.
- (3) GLOVES: One pair of heavy-duty leather per person.
- (4) EYE PROTECTION: One pair (meets standards ANSI Z87, latest edition).
- (5) HEARING PROTECTION: Use hearing protection whenever sound levels exceed 85 dB. Earphones (headset) required with radio shall have built-in hearing protection.
- (6) HEAD LAMP: With batteries and attachment for hardhat.

Additional Requirements for Tactical Water Tenders

- All three-axle water tenders shall have a GVWR and GAWR capable of handling 2500 gallons.
- All water tenders shall have a minimum of a 4" gravity dump valve located on the rear of the tank capable of dumping 90 % of the tanks contents into a standard folding tank. The valve shall be plumbed to allow the flow of water over any rear bumper protection into the folding tank.
- Tactical Water Tenders shall be equipped with a foam proportioner.
- A Tactical Water Tender could also be a Support Water Tender. If the vendor does have equipment that meets multiple resource categories, they will be required to submit a resource category form for each resource category they are offering.

Minimum Tender Inventory

- 1 - live Hose Reel min. 100' of 1" hose non-collapsible w/3/4" inside diameter
- 1 - Handheld Programmable Radio
- 1 - Nozzles, comb fog/straight stream, 1 1/2" NH Female
- 2 - Shovels, size 0 or 1
- 2 - Pulaskis
- 1 - Spanner Wrench, combination 1 1/2" to 2 1/2"
- 1 - Adjustable Hydrant Wrench
- 2 - Adapters 1 1/2" NPSH Female to 1 1/2" NH Male
- 2 - Adapters 1 1/2" NH Female to 1 1/2" NPSH Male
- 2 - Reducers 2 1/2" NH Female to 1 1/2" NH Male
- 1 - Reducer, 1 1/2" NH female to 1" NPSH Male
- 1 - Double Male 1 1/2" NH
- 1 - Double Female 1 1/2" NH
- 1 - Gated Wye 1 1/2" NH

- 1 – Fire Hose Clamp 2 ½”
- 200’ - 1 ½” cotton/synthetic hose NH thread
- 50’ - 2 ½” cotton/synthetic hose NH thread
- 10 – Fusee’s (fire starter)
- 2 – Line Gear (Day Pack)
- Reflective Triangles, bi-directional, set of 3
- Fire Extinguisher, 1 rated at 2A 10BC or better
- 1 – First Aid Kit (5 person)
- 2 – each Wheel chocks (see Definitions)
- 2 – each Portable Hand Lights
- Seat Belt for all passengers
- Minimum 4” Dump Valve at bottom of tank (min. 34” from ground)
- Tank meets baffling requirements specified in D.2.1.2
- 2 ½” valve at bottom of tank with NH hose threads
- All wheel drive (circle one) 4-wheel drive must have mud and snow tread on all wheels
- All season mud and snow tread with minimum 4/32 tread, front and rear
- Tire load ratings in accordance with vehicle GVWR
- Full size spare tire and wheel with changing equipment that shall fit any position or a spare tire for front and rear axle, minimum 4/32” tread
- Back up Alarm (87 Decibels measured at 5 feet) & back up lights (2)

Training/Experience

- (1) RT-130 Annual Fireline Refresher including fire shelter
- (2) Commercial Drivers License, when required.
- (3) All Tactical Water Tender and Engine personnel shall be trained in accordance with NWCG Wildland Fire Qualifications System Guide PMS 310-1 and qualifications carded in accordance with Exhibit N and Exhibit O, Training and Positions Qualifications Requirements. This does not apply to Support Water Tender personnel.
- (4) All operators shall be able to operate the equipment safely up to the manufacturer’s limitations.

The Contractor shall furnish wildland water tenders (**tactical**), consisting of two (2) personnel to include:

Number	Personnel Title	Tactical Tender
1 ea	Firefighter Type 1	All Types
1 ea	Firefighter Types 1 or 2 (FFT1 or FFT2)	All Types

PAYMENT

- a. **Double Shift** equipment is staffed with two operators or crews (one per shift). There will be no compensation for a double shift unless a separate operator is ordered in writing for the second shift. Agency personnel at the Section Chief level may, by resource order, authorize a second operator if needed during the assignment. Double shifts, when ordered, will be paid at 165% of the daily rate.

- b. **Daily Rate** - Payment will be made on basis of calendar days (0001 – 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.

WEED WASHING UNIT

Weed Washing Units for use on a local, Regional and Nationwide basis. The Contractor is responsible for all equipment, transportation to/from incident, and setup/take down necessary to meet or exceed the Agreement specifications.

EQUIPMENT REQUIREMENTS

Equipment shall meet all standards established by specification or incorporated by reference and shall be maintained in good repair by the Contractor.

Weed Wash Containment Station Equipment

Wash systems shall be high pressure with low volume and may be supplemented with low pressure with high volume. High pressure systems have water pressures designated above 1000 pounds per square inch (psi), while high volume systems deliver 10 gallons of water per minute or more.

Type 1 – Self-Contained with Recycling Water System

Type 2 – Self-Contained with Non-Recycling Water System

Standard method of hire: Daily rate which includes fully operated equipment, delivery, pickup, servicing, and mileage to/from site.

1. The Host Agency will:
 - a. Determine weed wash needs and type of unit(s) used and area(s) of placement.
2. The Government will:
 - a. Provide wash water to the wash site.
 - b. Remove waste water.
 - c. Remove solid waste or designate an appropriate disposal site.
 - d. Inspect washed equipment to ensure that the wash station meets agreement requirements. If the wash station does not meet the expectations of the government, it may be removed and replaced with a different system.
3. The Contractor shall:

- a. Thoroughly wash all vehicles and equipment to remove all soil, plant parts and seeds. Vehicles and equipment include, but are not limited to fire engines, heavy equipment, logging equipment, transports, pickups, SUVs and sedans;
 - b. Ensure that contractor services include, but are not limited to, the removal of all mud, caked dirt, and vegetative parts off of the undercarriage, cross members, frame, skid plates, belly pans, wheels, treads, tracks, suspension, bumpers, wheel wells, radiator grills, and the ledges on the inside of rear and front bumpers;
 - c. Visually and manually inspect hard to reach areas to ensure that they are clean;
 - d. Inspect and wash all soil and plant parts off of drafting hoses and drafting gear on engines and water tenders;
 - e. Ensure that the system used does not cause damage to the paint or electrical connections of vehicles and equipment being washed;
 - f. Keep the wash station in repair and fully operational during the designated assignment;
 - g. Capture, package and label solid waste in secure, easily transportable containment packages/devices, approved by the government representative at the incident, and place them at a location specified by the government. Containers/packages of solid waste shall weigh no more than 50 lbs each;
 - h. Maintain a daily record of all washed vehicles. The contractor shall use government forms, if required by the government.
4. **The Contractor shall not:**
- a. Dispose of solid waste unless an acceptable disposal site is designated by the government for the waste to be disposed of; otherwise this is the responsibility of the government (The intention is to ensure proper disposal).

Minimum Requirements - Type 1 Self-Contained with Recycling Water System

1. Portable commercial power washers with two hand-held, high pressure wands/nozzles. These nozzles must be suitable to wash 100% of the underbody surfaces.
2. Underbody washer. The underbody washing system must have nozzles that can be directed to within 45 degrees of vertical. The spray from these nozzles must be able to cover 100% of the underbody surfaces.
3. A wash water storage tank. The wash water storage tank shall have adequate capacity to operate the wash system continuously for a minimum of two hours.
4. Waste water shall be contained by the wash system. All wash residues shall be removed from the tracking surfaces of the vehicle being washed before vehicle exits system to prevent contamination to the exiting vehicle.
5. Wash water shall be filtered to a minimum of 100 microns, or use a clean water final rinse. Contractor is responsible for maintaining the quality of the recycled water to

ensure clean and safe washed equipment. Contractor shall maintain the containment system in a functional condition at all times. Prior to disposal, all waste water shall be filtered to 100 microns or smaller particle size. Waste water shall be disposed of in accordance with wastewater requirements of the authority having jurisdiction.

6. Contractor shall place solid waste in a secure, easily transportable (not to exceed 50 lbs) containment device in consultation with the ground support or resource advisor on the incident. Solid waste shall be disposed of by the host agency unless an appropriate disposal site has been identified by the government. In that case, the contractor shall dispose of the solid waste at this designated site.
7. Process time to wash a single wildland fire engine shall not exceed 5 minutes average for any 10 fire engines (i.e., 12 engines per hour).
8. The contractor shall provide at least two (2) skilled operators to perform operations. The operators shall be knowledgeable in the safe operation, maintenance, and repair of the wash system. Operators shall be able to demonstrate knowledge, skills, and abilities to manage all waste products from the washer system. These personnel shall be present at all times during the incident operational periods, and are responsible for the safe operation of the wash station.
9. The wash system must be able to accommodate equipment up to 10' wide.
10. Two, 1000 watt halogen work lights on stands and GFI module.
11. The wash system must comply with all applicable OSHA regulations related to operator safety and all segments of the washer must be in operating condition with no missing parts. All alternating current electric motors shall be listed with Underwriters Laboratory.

Minimum Requirements - Type 2: Self-Contained with Non-Recycling Water System (this may be a direct-draining or remote discharge system)

1. Portable commercial power washer with two hand-held, high pressure wand/nozzles. These nozzles must be suitable to wash 100% of the underbody surfaces.
2. A wash water storage tank. The wash water storage tank shall have adequate capacity to operate the wash system continuously for a minimum of two hours.
3. Waste water shall be disposed of in accordance with waste water requirements of the authority having jurisdiction.
4. Remote discharge systems shall have an adequate means to pump all waste water at least 200' from the wash station. Prior to disposal, all waste water shall be filtered to a minimum of 100 microns or smaller particle size, or through dewatering bags fabricated from Amoco 4553 or equivalent geotextile cloth, having a maximum apparent opening size of 150 microns.
5. Direct draining systems shall utilize Amoco 4553 or equivalent geotextile cloth, having a maximum apparent opening size of 150 microns. This cloth shall withstand heavy truck traffic. A 15' wide by 40' piece shall be supplied by the contractor and shall be installed on a pad of gravel or a well-drained surface that is provided by the host agency. Contractor shall maintain the mat in a functional condition at all times.

All solid waste greater than 150 micron size, including all geotextile cloth pieces, shall be placed in a secure, easily transportable containment (not to exceed 50 lbs) device in consultation with the ground support or resource advisor on the incident. Solid waste shall be disposed of by the host agency unless an appropriate disposal site has been identified by the government. In that case, the contractor shall dispose of the solid waste at this designated site.

6. Process time to wash a single wildland fire engine under normal conditions shall not exceed 8 minutes average for any 10 engines (i.e., 7.5 engines per hour).
7. The contractor shall provide at least two (2) skilled operators to perform operations. The operators shall be knowledgeable in the safe operation, maintenance, and repair of the wash system. Operators shall be able to demonstrate knowledge, skills, and abilities to manage all waste products from the washer system. These personnel shall be present at all times during the incident operational periods, and are responsible for the safe operation of the wash station.
8. The wash system must comply with all applicable OSHA regulations related to operator safety and all segments of the washer must be in operating condition with no missing parts. All alternating current electric motors shall be listed with Underwriters Laboratory.
9. The wash system must be able to accommodate equipment up to 10' wide.
10. Two (2), 1000 watt halogen work lights on stands and GFI module.
11. The system may have:
 - a. A mechanical underbody washer. The underbody washing system must have nozzles that can be directed to within 45 degrees of vertical. The spray from these nozzles must be able to cover 100% of the underbody surfaces.
 - b. An additional operator, skilled and knowledgeable in the safe operation, maintenance and repair of the wash system. Operators shall be able to demonstrate knowledge, skills and abilities to manage all waste products from the washer system. These personnel shall be present at all times during the incident operational periods, and are responsible for the safe operation of the wash station.

PAYMENT

- a. On-Shift includes time worked, time that resource is held or directed to be in a state of readiness, and compensable travel (resource traveling under its own power) that has a specific start and ending time.
- b. Daily Rate - Payment will be made on basis of calendar days (0001 - 2400). For fractional days at the beginning and ending of time under hire, payment will be based on 50 percent of the Daily Rate for periods less than 8 hours.