

### REGION 3 ENGINE INFORMATION

**ENGINES.** Standard Method of Hire: Daily Rate, Fully Operated

A. Personnel Requirements for Engines:

(1) Three wildland firefighter positions are recognized: Single Resource Boss-Engine (ENGB), Advanced Firefighter/Squad Boss (FFT1), and Firefighter Type 2 (FFT2). Any combination of the three may currently staff the Engine, which may affect the mission/task assigned by the government.

**NOTE: In 2004, all engines will be required to have a NWCG 310-1 qualified single resource boss-engines.**

(2) For each individual, contractor shall supply certification (attached) showing the individual has met all the training, physical fitness and experience levels for the position being performed when assigned.

(a) All wildland engine personnel shall pass the Work Capacity Fitness Test (Pack Test) annually at the arduous level (45 pound pack, 3 miles in 45 minutes or less). Information on the Work Capacity Fitness test is contained in "Fitness and Work Capacity" Second Edition, NFES 1596 April 1997, available from the publications section under the NWCG web site ([www.nwcg.gov](http://www.nwcg.gov)). Another source is found in the Forest Service web site: ([www.fs.fed.us/fire/safety](http://www.fs.fed.us/fire/safety)) then refer in the directory to "Work Capacity Test".

(b) All returning wildland firefighting personnel shall complete an annual refresher training in the use of Fire shelter and Standards for Survival. Refer to the Forest Service web site: ([www.fs.fed.us/fire/safety](http://www.fs.fed.us/fire/safety)) then refer in the directory to "Fire Shelters". "Standards for Survival" are found at the NWCG web site.

(c) Contractor, upon request, shall provide complete records that document each employee's training and qualifications for inspection by the government.

(d) The contractor may request consideration for training or physical fitness testing equivalent to and accepted by NWCG standards in PSM-310-1.

(3) The contractor's performance will be based on the Fire Crew Performance Rating, ICS-224, which should be completed at the end of the assignment or at the incident. Contractor should retain a copy for subsequent use.

(4) The following Personal Protective Equipment is required:

Boots – All leather, lace-up type, minimum 8 inches high with lug type sole in good conditions (steel toe boots are unacceptable).

Hardhat – Plastic, Class B, ANSI Z89.1, 1986, OSHA approved, with chinstrap.  
Note: Hardhat meeting NFPA Standard 1977, 1998 Edition, is required.

Gloves – One pair of heavy-duty leather per person.

Eye Protection – One pair per person (meets standards ANSI 287, latest edition).

Head Lamp – One lamp per person with batteries and attachment for hardhat.

Canteen – One-quart size, two per person required, four per person recommended (filled prior to arrival at Incident).

Fire Shelter – One serviceable shelter per person.

Flame Resistant Clothing – Shirt and trousers for routine fireline duties, flame resistant clothing must:

- Self-extinguish upon removal from heat source.
- Act as effective thermal barrier by minimizing conductive heat transfer.
- Not melt or shrink to any appreciable degree upon decomposition during exposure to a high heat source.
- Be manufactured from flame retardant treated (FRT) cotton, FRT rayon, FRT wool, aramid (Nomex), (NFPA 1977), or other similar fabric.

(5) In addition, structural engine personnel shall have attended Firefighter 1 (NFPA Standard 1001) or equivalent, or be certified by the chief or their fire department as being able to perform at the Firefighter 1 level.

B. Tank Baffling. The water tanks must be equipped with partitions that reduce the shifting of the water load. Engines shall have the water tank baffled in a manner that conforms to the NFPA Standards for Mobile Water Supply Apparatus, or the American Society of Mechanical Engineers standards or other industry-accepted engineering standards.

C. Time of Hire. At the time of hire, the contractor shall provide a complete inventory of the fire fighting accessories on the vehicle. A copy of the inventory shall be provided to the inspector and the procurement unit each time the vehicle is hired or re-assigned to an incident.

D. Classifying. When classifying engines, all of the requirements for both equipment and personnel must be met to be acceptable and must be certified by a government fire expert stating that both meet the minimum requirements. Equipment lacking this certification will not be signed up. It is the contractor's responsibility to obtain the certification prior to dispatch.

When classifying Type 1 and 2 Structural Engines (E1 and E2) an agency government fire expert will certify the equipment meets the minimum requirements specified in NFPA 1901. The government fire expert is defined as a government employee (local, state, or federal) who through their regular employment, works with and is knowledgeable regarding this type of equipment.

E. Foam Units. Any engine with the following type foam capabilities shall be paid additional compensation. The government shall provide the foam or make reimbursement when provided by the contractor.

- (1) Compressed Air Foam System (CAFS) – Plumbed into the system, increase the rate by 10 percent of the specified operated rate.
- (2) Metering Systems (Automatic Regulating Proportioning System) – Systematic metering units increase the rate by 5 percent of the specified operated rate.
- (3) Any other foam capabilities, such as eductor units, which siphon foam into the hose system, or when the foam is dumped directly into the tank, will not receive any additional compensation.
- (4) Contractor provided foam must be approved by the government.

#### ADDITIONAL REQUIREMENTS FOR ENGINES

1. When fully loaded (including operators and accessory equipment) will conform to manufacturer gross vehicle weight rating (GVWR). This includes balancing the load in a manner that all axle weights comply with the manufacturer's gross axle weight rating. Preseason sign up will require the unit to be fully loaded, with the contractor providing weight tickets for the load from a certified scale. The weight tickets will be by individual axle weight.
2. Private sector vehicles shall be licensed to carry the GVW of the loaded unit. Private sector vehicles that require a CDL operator when operating on public highways shall be furnished with a licensed CDL operator at all times.

3. Vehicles shall be configured in a manner that vehicle center of gravity is within the design limits of the equipment.
4. At the time of hire, the contractor or cooperator shall provide a complete inventory of the firefighting accessories on the vehicle. A copy of the inventory shall be provided to the inspector and the procurement unit each time the vehicle is hired or reassigned to an incident.
5. Also see 24.3-2 general guidelines and equipment hire.

Listed below is the minimum required engine inventory:

- 2 nozzles, combination fog/straight stream, 1" National Pipe Straight Hose (NPSH) female
- 2 nozzles, combination fog/straight stream, 1-1/2" National Hose (NH) female
- 20 feet, suction hose with strainer or screened foot valve
- 2 shovels, size 0
- 2 pulaski's
- 1 spanner wrench, combination 1" to 1-1/2"
- 2 gated wyes, 1-1/2" NH threads
- 4 reducers, 1-1/2" NH female to 1" NPSH male
- 2 adapters, 1-1/2" NH female to 1-1/2" NPSH male
- 2 adapters, 1-1/2" HPSH female to 1-1/2" NH male
- 2 increasers 1" NPSH female to 1-1/2" NH male
- 2 adaptors 1/4 turn to 1" NSH (1 female/1 male)
- 1 double male 1" NPSH threads
- 1 double female 1" NPSH threads
- 1 double male 1-1/2" NH threads
- 1 double female 1-1/2" NH threads
- 1 fire hose clamp
- 1 5-gallon container for drinking water
- 1 first aid kit (5 person)
- 1 set of 3 reflectors
- 1 fire extinguisher (4BC or better)
- 1 set of wheel chocks
- 5 gallons (minimum), fuel to operate pump and engines for 12 hours
- 1 pump for water fill or have drafting capabilities

### CLASSIFICATION FOR ENGINES

MINIMUM STANDARDS - The following guide is to aid in the classification of engines. When typing equipment all of the standards must be met to qualify the equipment. Failure to meet any standard places the equipment in a lower type or disqualifies the equipment in its entirety.

| COMPONENTS                  | MINIMUM STANDARDS FOR TYPE |         |         |         |         |         |        |
|-----------------------------|----------------------------|---------|---------|---------|---------|---------|--------|
|                             | 1*                         | 2*      | 3       | 4       | 5       | 6       | 7      |
| Pump Capacity<br>gpm at psi | 1000-150                   | 500-150 | 250-150 | 50-100  | 50-100  | 50-100  | 10-100 |
| Tank Capacity<br>(Gallons)  | 400+                       | 500+    | 750+    | 400-750 | 400-750 | 150-400 | 50-200 |
| Hose, 2 1/2" (feet)         | 1200                       | 1000    |         |         |         |         |        |
| Hose, 1 1/2" (feet)         | 400                        | 500     | 500     | 300     | 300     | 300     |        |
| Hose, 1" (feet)             | -0-                        | -0-     | 500     | 300     | 300     | 300     | 200    |
| Ladder (feet)               | **48'                      | **48'   |         |         |         |         |        |
| Master Stream<br>(GPM)      | 500                        |         |         |         |         |         |        |
| Personnel (min<br>no.)      | 4                          | 3       | 2       | 2       | 2       | 2       | 2      |

\*Type 1 and 2 Structural Engines must also meet minimum Specifications of NFPA 1901.

\*\*This includes 24' extension ladder, 14' roof ladder and 10' attic ladder for a total of 48'.

### RATES

| PRIVATE SECTOR<br>ENGINES<br>Class | DAILY RATE<br>(1 OP PERIOD) | DAILY RATE<br>(2 OP PERIODS) | NUMBER OF<br>PERSONNEL<br>PER SHIFT |
|------------------------------------|-----------------------------|------------------------------|-------------------------------------|
| E1 Structural Engine I             | TBD                         | TBD                          | 4                                   |
| E2 Structural Engine II            | TBD                         | TBD                          | 3                                   |
| WE3 Wildland Engine III            | TBD                         | TBD                          | 2                                   |
| WE4 Wildland Engine IV             | TBD                         | TBD                          | 2                                   |
| WE5 Wildland Engine V              | TBD                         | TBD                          | 2                                   |
| WE6 Wildland Engine VI             | TBD                         | TBD                          | 2                                   |
| WE7 Wildland Engine VII            | TBD                         | TBD                          | 2                                   |

- See the above referenced section for engine classification/requirements and engine certifications and checklist.
- Engine rate is to be used only when the equipment and personnel meet all requirements.
- Number of personnel is the minimum required per operational period (shift).
- Extra Engine Personnel \$175 per day, must be ordered through the resource process.
- 4X4 Engine capability increase the rate 20 percent, must be ordered through the resource process.

**CERTIFICATIONS FOR ENGINES**

This certification is incorporated in and made part of Emergency Equipment Rental Agreement (EERA) No. \_\_\_\_\_. A copy of the EERA, along with this certification shall be provided to the Finance/Administration Section Chief or their designated representative immediately upon arrival at the incident.

Failure to provide equipment meeting the equipment type above shall result in a down grade of typing and a reduction in rate to the type level the equipment meets as set forth in the Interagency Incident Business Management Handbook.

| EQUIPMENT TYPE | LICENSE NO. | SERIAL NO. |
|----------------|-------------|------------|
| _____          | _____       | _____      |
| _____          | _____       | _____      |
| _____          | _____       | _____      |

The following individuals meet all the personnel and training requirements for the position listed.

| NAME  | POSITION |
|-------|----------|
| _____ | _____    |
| _____ | _____    |
| _____ | _____    |

The personnel listed above shall be provided with the equipment, in the numbers required by the agreement and equipment typing configurations. The personnel and equipment qualifications are in accordance with the Region 3 Supplement to Chapter 20 of the Interagency Incident Business Management Handbook.

I certify that the above listed equipment meets the minimum typing standards for the type listed. I also certify that the above listed personnel meet all of the qualification requirements for the position(s) listed.

\_\_\_\_\_  
Contractor Representative  
(Signature)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name and Title (Printed)

\_\_\_\_\_  
Address

\_\_\_\_\_  
Phone No.

\_\_\_\_\_  
City, State