



# NATIONAL WILDFIRE COORDINATING GROUP

National Interagency Fire Center  
3833 S. Development Avenue  
Boise, Idaho 83705

## Memorandum

Reference: NWCG#006-2008

To: NWCG Executive Board, Geographic Area Coordinating Group Chairs, and  
Fire Equipment Working Team Chair

From: NWCG Chair *Brian McManis*

Date: June 5, 2008

Subject: Engine and Water Tender Typing Standards

During the fall 2007 NWCG Executive Board Meeting held in Shepherdstown, West Virginia, the Fire Equipment Working Team presented the NWCG with updated engine and water tender typing standards, which were then formally approved by the NWCG. The NWCG also concurred with the recommendation to increase the staffing for Type 3 engines to 3 persons for national mobilization.

The review process for the updated standards occurred over several months and took into consideration input received from both federal and state agencies. We are working towards identical standards between NWCG and NIMS typing, and this update brings us closer, but there are still discrepancies to be addressed. We will continue to work with the Incident Management Systems (IMS) Division of FEMA to gain agreement on wildland engine (Type 3-7) and tender typing as contained on the attached table, with the goal of FEMA embracing our standards and allowing NWCG ownership of wildland engine and tender standards in the future. NWCG has also provided input to FEMA on Type 1 and 2 engine standards, and has also recommended that FEMA take ownership of these standards in an effort to enhance collaboration and streamline the typing process.

The NWCG has formally adopted the new typing standards for engines and tenders as contained in the attachment. As coordination on this effort continues with FEMA, additional changes may be required and will be relayed to you as they occur. Please implement utilization of these new standards immediately. These updates will be formally incorporated into the 410-1 revision cycle in 2009.

Attachment

cc: NWCG Executive Board

ATTACHMENT

**National Mobilization Minimum Engine and Water Tender Typing  
October 2007**

Requirements	Engine Type						
	Structure		Wildland				
	1	2	3	4	5	6	7
Tank minimum capacity (gal)	<b>300</b>	<b>300</b>	500	750	400	150	50
Pump minimum flow (gpm) @ rated pressure (psi)	1000	<b>500</b>	150	50	50	<b>50</b>	10
Hose 2½"	1200	1000	-	-	-	-	-
1½"	<b>500</b>	500	<b>1000</b>	300	300	300	-
1"	-	-	500	300	300	300	200
Ladders per NFPA 1901	<b>Yes</b>	<b>Yes</b>	-	-	-	-	-
Master stream 500 gpm min.	Yes	-	-	-	-	-	-
<b>Pump and roll</b>	-	-	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
<b>Maximum GVWR (lbs)</b>	-	-	-	-	<b>26,000</b>	<b>19,500</b>	<b>14,000</b>
Personnel (min)	4	3	3	2	2	2	2

Requirements	Water Tender Type				
	Support			Tactical	
	S1	S2	S3	T1	T2
Tank capacity (gal)	<b>4000</b>	2500	1000	<b>2000</b>	<b>1000</b>
Pump minimum flow (gpm) @ rated pressure (psi)	300	200	200	<b>250</b>	<b>250</b>
Max. refill time (minutes)	30	20	15	-	-
Pump and roll	-	-	-	<b>Yes</b>	<b>Yes</b>
<b>Personnel (min)</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>

1. All types shall meet federal, state and agency requirements for motor vehicle safety standards, including all gross vehicle weight ratings when fully loaded.
2. Type 3 engines and tactical water tenders shall be equipped with a foam proportioner system.
3. All water tenders and engine types 3 through 6 shall be able to prime and pump water from a 10 foot lift.
4. Personnel shall meet the qualification requirements of NWCG *Wildland Fire Qualification System Guide*, PMS 310-1.

**Common Additional Needs – Request as Needed**

All Wheel Drive (includes four wheel drive)  
 High pressure pump (250 psi at one half flow of Type)  
 Foam Proportioner  
 Compressed Air Foam System (CAFS) 40 cfm minimum  
 Additional Personnel