ADO – Mobile Water Supply Apparatus
Manipulative Skill Objectives

PREVENTIVE MAINTENANCE

1. Perform and document routine tests, inspections, and servicing functions on specified systems and components.

Reference: NFPA 1002, 2017 Edition, 4.2.1(B), 4.2.2 (B), 4.3.7 (B), 10.1.1 (B)

Condition: Given a fire department Mobile Water Supply apparatus (with manufacturer specifications), inspection form or check-off sheet. (Sample check-off sheet provided with this standard).

Competence: • Check batteries for fluid level and corrosion (if maintenance free, check indicator for correct color).
• Check braking system for fluid level/drain air tanks of water.
• Check coolant system for fluid level, leaks, and cleanliness.
• Check electrical system for corrosion and tight connections.
  - Siren and other warning devices.
  - Headlights, running lights, and turn signal flashers.
  - Emergency warning lights.
• Check fuel level.
• Check hydraulic fluids for fluid level and leaks.
• Check engine oil for fluid level and leaks.
• Check tires for pressure and wear.
• Check steering system for range of motion and looseness.
• Check engine belts for tightness and wear.
• Check tools, appliances, and equipment, fixed equipment, lighting.
• Check windshield wiper blades/fluid level.
• Check water tank level
• Check pumping system (if applicable)
• Check rapid dump system (if applicable)
• Check foam system (if applicable)
• Start apparatus and monitor gauges and other control devices.
• Check all items off on check-off sheet
• Correct, document, and report deficiencies found.

Time: 15:00 minutes.
DRIVING OPERATIONS

NOTICE: The driving skills in this standard are used to determine participant’s qualifications to become certified at the level of ADO – Mobile Water Supply Apparatus. The passing of these skills does not qualify a participant for any other certification or licenser, such as a Commercial Driver’s License (CDL) and is not intended to certify, verify or approve an individual’s ability to drive fire apparatus on state or federal highways. The responsibility to determine who will drive fire apparatus resides with the local fire department or the authority having jurisdiction (AHJ).

SPOTTER INSTRUCTIONS: The purpose of having a spotter assist while backing an apparatus is to protect life and property. The spotter should alert the driver if property damage could occur or damage the apparatus. The spotter will not DIRECT the driver when to stop during a test.

2. Operate a fire department Mobile Water Supply apparatus so that the vehicle is safely operated in compliance with all applicable state and local laws, departmental rules and regulations.

Reference: NFPA 1002, 2017 Edition, 4.3.1(B), 4.3.6(B)

Condition: Given a fire department apparatus (with manufacturers specifications) and a predetermined route on a public way that incorporates the maneuvers and features specified below, and that the driver/operator is expected to encounter during normal operations:

a. Travel a straight section of urban, business street or a 2-lane rural road at least 1 mile in length.
b. Make 1 left & 1 right hand turn from a stoplight or stop sign.
c. Negotiate 1 through-intersection.
d. Negotiate 1 curve, either right or left.

Competence: • Adjust and use mirrors.
• Use seat belts for all occupants.
• Observe all posted speed limits.
• Maintain safe following distances.
• Maintain control of the vehicle while accelerating, decelerating, and turning.
• Stop fully at all stop signs or stop lights.
• Use turn signals.
• Keep apparatus in correct lane of travel.
• Monitor all gauges so vehicle is operated within manufactures specifications.

Time: Not to exceed 15:00 minutes.
3. **Back a Mobile Water Supply apparatus from a roadway into restricted spaces on both the right and left sides of the vehicle, Alley Dock.**

**Reference:** NFPA 1002, 2017 Edition, 4.3.2(B), 4.3.6(B)

**Condition:** Given a fire department Mobile Water Supply apparatus (with manufacturer's specifications), spotter (used as a guide and safety to direct the apparatus when backing only), cones, and a restricted space 12 ft. in width, requiring 90-degree right or left-hand turns from a 40’ wide roadway, so that the vehicle is parked within the restricted area without having to stop and pull forward and without crossing over or striking cones. A maker should be placed on the ground, on the left side of the apparatus, to mark where the front left tire should be spotted, by the operator, to know where to stop the apparatus and park.

**Competence:**
- Adjust and use mirrors for backing.
- Driver/passengers wearing seat belts.
- Spotter used to back apparatus, for safety.
- Stop apparatus so that the center of the left front wheel is within 6” of the center of the marker.
- Completed skill correctly without crossing over or striking cones.

**Time:** 5:00 minutes

4. **Maneuver a Mobile Water Supply apparatus around obstructions on a roadway while moving forward and in reverse, Serpentine.**

**Reference:** NFPA 1002, 2017 Edition, 4.3.3(B), 4.3.6(B)

**Condition:** Given a fire department Mobile Water Supply apparatus (with manufacturer's specifications), spotter (used as a guide and safety to direct the apparatus when backing only), cones, a roadway with obstructions, so that the vehicle is maneuvered through the obstructions without stopping to change the direction of travel and without crossing over or striking cones.

**Competence:**
- Adjust and use mirrors for backing.
- Driver/passengers wearing seat belts.
- Spotter used to back apparatus.
- Completed skill correctly without crossing over or striking cones.

**Time:** 5:00 minutes
5. **Turn a Mobile Water Supply apparatus around 180 degrees within a confined space, Confined Space Turnaround.**

**Reference:** NFPA 1002, 2017 Edition, 4.3.4(B), 4.3.6(B)

**Condition:** Given a fire department Mobile Water Supply apparatus (with manufacturer's specifications), spotter (used as a guide and safety to direct the apparatus when backing only), cones, area where vehicle cannot make a U-turn without stopping and backing up, so that the vehicle is turned 180 degrees without passing over or striking cones.

**Competence:**
- Adjust and use mirrors for backing.
- Driver/passengers wearing seat belts.
- Spotter used to back apparatus.
- Completed skill correctly without crossing over or striking cones.

**Time:** 5:00 minutes

6. **Maneuver a Mobile Water Supply apparatus in restricted horizontal and vertical clearances, Diminishing Clearance.**

**Reference:** NFPA 1002, 2017 Edition, 4.3.5(B), 4.3.6(B)

**Condition:** Given a fire department Mobile Water Supply apparatus (with manufacturer's specifications), spotter (used as a guide and safety to direct the apparatus when backing only), cones, course that requires the operator to move through areas of restricted horizontal clearances, so that the operator accurately judges the ability of the vehicle to pass through the openings without passing over or striking cones.

**Competence:**
- Adjust and use mirrors.
- Driver/passengers wearing seat belts.
- Completed skill correctly without crossing over or striking cones.
- Stop the vehicle before crossing cone at finish line.

**Time:** 5:00 minutes
COMMUNICATIONS

7. Initiate a response

Reference: NFPA 1002, 2017 Edition, 4.4.1, 4.4.4

Condition: The candidate, given the report of an emergency, facility SOPs, and communications equipment, shall initiate a response so that all necessary information is obtained and recorded and communications equipment is operated properly, and emergency procedures are activated.

Competence: • Operates communications equipment properly (telephone, radio, cell phone, etc)
  • Identifies the type of emergency and assesses the current situation
  • Identifies the incident location
  • Identifies the resources needed
  • Records all pertinent information related to the emergency – CRITICAL POINT
  • Notifies proper entity (fire brigade, fire department, unit supervisor, etc) and activates emergency response according to department SOPs – CRITICAL POINT

Time: 5:00 minutes

8. Communications – Telephone Calls

Reference: NFPA 1002, 2017 Edition, 4.4.2

Condition: The candidate, given a specific situation, shall demonstrate the procedures for answering emergency and non-emergency calls using department communications equipment and ensuring that all information is received and relayed appropriately.

Competence: • Identifies self and department in a timely fashion
  • Records all pertinent information received by caller (date, time, caller’s name, callback number, and their own name)
  • Hangs up last

Time: 3:00 minutes
9. **Communications – Radio**

**Reference:** NFPA 1002, 2017 Edition, 4.4.3

**Condition:** The candidate will properly demonstrate transmitting and receiving radio messages using radio equipment

**Competence:**
- Checks equipment and ensures that radio is on right frequency, battery is charged, and radio is ready to be used – CRITICAL POINT
- Waits for open channel prior to transmitting, ensuring that they are not interrupting other transmissions
- Differentiates between routine and emergency traffic
- Uses radio phonetics correctly
- Transmits message clearly, concisely, and using clear speech (no codes)

**Time:** 1:00 minute

**OPERATIONS**

10. Maneuver and position a Mobile Water Supply apparatus at a water shuttle fill site so that the apparatus is correctly positioned, supply hose are attached to the intake connections.

**Reference:** NFPA 1002, 2017 Edition, 10.2.1 (B)

**Condition:** Given a Mobile Water Supply apparatus (with manufacturer's specifications), 1-section of supply hose (2 1/2” or larger), adapters or connectors if needed. (Water source could be hydrant or source pumper)

**Competence:**
- Fill site is assessed for hazards: obstructions, terrain, other apparatus.
- Maneuver apparatus into fill site.
- Stop apparatus at fill site marker and set brake.
  - **Connect supply line(s) to apparatus, by fill site operator.**
  - **Monitor tank level, turn-off intake valve when tank is full by fill site operator**
- Ensure supply lines are disconnected.
- Safely exit fill site when directed by fill site operator.

**Time:** 10:00 minutes
11. Maneuver and position a Mobile Water Supply apparatus at a water shuttle dump site so that all the water being discharged from the apparatus enters the portable tank.

Reference: NFPA 1002, 2017 Edition, 10.2.2 (B)

Condition: Given a dump site and portable water tank.

Competence: • Maneuver apparatus into dump site location and set brake.
• Apparatus is position to assure water being discharged enters portable tank.
• Operate water discharge system – remote or manual dump.
• Monitor safety around apparatus during discharge process.
• Upon completion of dumping process exit dump site in safe manner and return to fill site.

Time: 10:00 minutes

12. Establish a water shuttle dump site using a minimum of two portable water tanks.

Reference: NFPA 1002, 2017 Edition, 10.2.3(B)

Condition: Given a two portable water tanks, low-level strainers, water transfer equipment, fire hose, and a fire apparatus equipped with fire pump.

Competence: • Select dump site (level ground) based on department SOP/SOG, access for apparatus and location based on current emergency situation.
• Place ground cover down to protect water tanks.
• Set-up portable water tanks, ensure tank drain is closed or secured, tanks positioned appropriately for operation.
• Direct first tender/tanker into position and dump water into portable tank
• Connect hard suction hose to strainer and to drafting apparatus, place strainer in first tank.
• Connect water transfer system between tanks to allow water movement.
• Direct tankers to enter/exit dump site during water shuttle operations.

Time: 10:00 minutes