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| ***REPLACE WITH YOUR MASTHEAD*** | | |
| **VFIS logo black JPG** | **SOG Title:** | |
| **SOG Number:** | |
| **Original Date:** | **Revision Date:** |
| **ABC Fire Department General Operating Guideline** | | |

**Water Supply**

***This is a sample of a standard operating guideline (SOG) on this topic. You should review the content, modify as appropriate for your organization, have it reviewed by your leadership team and if appropriate your legal counsel. Once adopted, make sure the SOG is communicated to members, implemented and performance monitored for effective implementation.***

**Purpose:**

To provide fire officers with a selection of water supply options that may be used for a specific incident.

**Procedure:**

**Water Supply Options**

* Several water supply options may be available depending on the location of the incident
* The most common option will either be the water from the engines arriving after the initial engine or from tankers
* Other options are portable dump tanks and dry or wet fire hydrants
* The option used depends on the availability, proximity and integrity of the water supply
* The initial arriving unit or incident commander should determine which option to use
* If there is no fixed water supply available, the incident commander must request for additional water resources as required

**Procedures**

* Directly to fire with no supply line laid:
  + The first in engine proceeds directly to fire without laying a supply line
  + The second in engine is responsible for water supply to the first arriving engine
  + The second in engine has choice of two hose lays
    - Forward lay — from water source to fire
    - Reverse lay — from fire to water source
  + This is to be the standard and the primary method for establishment of water supply to be used by the initial responding units
* Laying a dry supply line (split lay):
  + The first in engine wraps a dry supply line around a fixed and stable object and then proceeds directly to fire with the crew intact
  + The first in engine must announce that they are laying a dry line to other responding apparatus to inform them of the change in normal operations
  + The second arriving engine will connect the supply line to the water supply and charge the line.
  + If the second in engine connects the dry line to itself and supplies its tank water, the second in engine must establish its own water supply as soon as possible
  + This procedure would be selected by the first in engine in cases of dead end streets, alleyways, condominium complexes, long driveways or other limited access situations
* Water supply in front of the fire building:
  + If a water supply is available within 100 feet and is not in the collapse zone of the fire building, it may be used for water supply
  + The first arriving engine shall proceed directly to the fire and begin to attack the fire with its tank water
  + The second in engine will position out of the way and the driver shall stretch and connect a supply line from the first in engine to the water supply
* Tanker shuttle without portable tank:
  + First arriving engine attacks fire off its tank water
  + Second in engine connects supply line from discharge to attack engines intake or dry line and supplies first engine with its tank water
  + The second in engine shall connect a supply line to an intake for the first arriving tanker
  + The second engine shall fill its tank while pumping tanker water to attack pumper
  + As the tanker becomes empty, the second in engine shall pump its tank water to the attack engine, disconnect the supply line from the tanker and reconnect it to the next tanker as soon as possible
  + The empty tanker will proceed to the location that has been established for filling tankers and return to the second in engine as soon as possible
  + This procedure is repeated as required for a continuous water supply to the attack pumper
  + This procedure requires a minimum of two tankers
* Tanker shuttle with portable tank
  + First arriving engine attacks fire off its tank water
  + Second in engine connects supply line from discharge to attack engines intake or dry line and supplies first engine with its tank water
  + The second in engine shall set up a hard suction for drafting
  + First arriving tanker drops off the portable tank at the second engine, drops its water supply into the portable tank and proceeds to tanker fill area
  + The second engine shall begin drafting procedure and fill its tank while pumping water to the attack pumper
  + Tankers shall fill the portable tank, proceed to tanker fill area and return as soon as possible as required
  + This procedure is repeated for a continuous water supply to the attack pumper
  + This procedure requires a minimum of two tankers
* Miscellaneous water supply options:
  + Pumping water supply lines:
  + All water supply lines shall be opened slowly and the pressure increased until the attack pumper has sufficient pressure
  + The pressure for pumping supply lines shall not exceed 180 psi
* Laying forward supply lines:
  + Driver stops engine just past water supply
  + Rear fire fighter dismounts engine and takes supply line from hose bed with hydrant gates and hydrant tools (hydrant and spanner wrenches)
  + The fire fighter shall secure line to water supply and signal the driver to proceed to attack engine at no more than 10 mph
  + Once at the attack engine, the driver shall park and dismount the engine The driver shall disconnect the supply line from the hose bed and assist the driver of the attack engine with connection to the intake
  + The firefighter at the water supply will charge the supply line after he visually or verbally determines the supply line is connected to the attack pumper
  + The officer should initially supervise the water supply operation and then perform size up of the fire for placement of the second attack hose line
* Laying reverse supply lines:
  + Second arriving engine stops at attack engine and officer and firefighter dismount
  + Firefighter removes supply line from hose bed of second engine and wraps the tire of the attack engine, leaving enough of the line to reach the intake
  + Upon direction from officer, the second engine driver proceeds at no more than 10 mph to lay hose to the water supply
  + Driver of attack engine connects supply line to the intake
  + Driver of second engine makes connection to water supply and charges supply line upon confirmation of connection to attack engine intake
  + The officer should initially supervise the water supply operation and then perform size up of the fire for placement of the second attack hose line
* Laying of dual supply lines:
  + The process of laying and charging dual supply lines is the same as the forward and reverse lay with the addition of the second line
  + Officers should only lay dual supply lines when they are sure it will not exceed the total length of the supply line on the apparatus unless additional lengths are provided for through other arriving apparatus
  + If dual lines are required and the officer is unsure of the distance, one supply line should be laid to assure at least one initially uninterrupted water supply The second line should be laid as soon as possible
  + When charging dual supply lines, water supply should be established by opening and flowing water through one line prior to opening the second line
  + The first line to be opened shall be the one attached to the hydrant connection facing the fire This shall also be the first line to receive a hose clamp at the engine
* Private yard hydrants:
  + First and second arriving apparatus may utilize private yard hydrants as required using normal procedures
  + Additional apparatus should use town water supply if possible
* Large diameter (5”) supply line:
  + Hose clamps are not to be used on large diameter hose
  + Connection to hydrant:
  + Connect large diameter hydrant gate to steamer connection;
  + Connect hydrant gate to one 2-1/2’ hydrant butt and leave other side capped;
  + If unable to remove steamer cap, connect hydrant gates on both sides of hydrant and connect a 5” to 2-1/2” reducer to gate facing the fire
  + All valves should be opened slowly and the bleeders left open until all air is expelled
  + The engine pressure when pumping large diameter hose should not exceed 180 psi
  + LDH should be repacked onto apparatus with the engine driving forward only and according to the manufacturers’ recommendation

***This is a sample guideline furnished to you by VFIS. Your organization should review this guideline and make the necessary modifications to meet your organization’s needs. The intent of this guideline is to assist you in reducing exposure to the risk of injury, harm or damage to personnel, property and the general public. For additional information on this topic, contact your VFIS Risk Control representative.***

**References:**

West Redding (CT) VFD – GOG 6-OF-605 Developed/Revised/Reviewed by VFIS ETC