Category: GENERAL	*Approved: Chief Howard Rice, Jr. 09/05/2023*
SOG O-37	*Last Updated: Chief Howard Rice, Jr. 09/05/2023*

Falmouth Fire-EMS Operating Guideline

Rural Water Supply

Objective:
To establish a reliable water supply for non-Hydrant areas of Falmouth.

Purpose:
To allow all personnel to be familiar with water supply in non-hydrant areas (greater than 1,000 feet from a pressurized hydrant). where there is no drafting site within 1000' of the location of the fire.

General Information:

There are currently nine (9) emergency response districts in Falmouth. These districts have associated boxes, which indicate what the run card will be. Of these districts, four (4) of them cover areas in West Falmouth where there are no pressurized hydrants. For these run cards there are three (3) mutual aid tankers on each alarm in addition to two engines and an aerial.

The preferred way of getting water to a fire scene or re-filling a tanker is use of a pressurized hydrant. For distances under 1,00 feet from a hydrant, a large diameter supply line is used. For distances over 1,000 feet, the water is usually trucked in. In areas where there are no pressurized hydrants, a dry hydrant may be used. There are several dry hydrants throughout town, made up of both underground water storage tanks and static water sources such as ponds. Dry hydrants can work well, but they are labor-intensive and may not have the same water flow capacity or volume that a pressurized hydrant does.

Definitions:

Attack Engine - The pumper positioned at the fire scene deploying fire attack lines.

Supply Engine – The pumper supplying the Attack Engine with water.

Dump Site - The location for shuttle apparatus to dump their water. A large diameter Siamese adapter (Rural Hitch) or portable tank(s) should be set up.

Fill Site - The location where shuttle apparatus fill with water for transport to the incident location. An engine would be placed for drafting or for pressurized hydrant operations.

Fill Site Supervisor - The individual responsible for fill site operations.

Incident Commander (IC) - The individual responsible for all incident activities and personnel. The IC is also responsible for setting the incident objectives.

Relay Operations - Process utilizing two or more engines to supply the attack engine directly from the water source with hose lines.

Shuttle Operations - A process utilizing tankers to move water from a specified source to the incident.

Shuttle Route - The most efficient route possible for shuttle apparatus to utilize in transporting water. Routes that do not have tankers backing up are preferred.

Water Supply Officer (WSO) - The individual responsible for the development of adequate water supplies required to implement the tactics outlined by the Incident Commander. This position will be the responsibility of the 2nd Arriving Engine officer unless the Incident Commander has already been assigned this position.

Guidelines:

1. For responses outside of hydrant districts, a supply line will be laid between the 1st Arriving Engine (Attack Engine) and the 2nd Arriving Engine (Supply Engine). This will be accomplished either by the 1st Arriving Engine laying into the scene (preferred) or by the 2nd Arriving Engine reverse-laying from the scene to an area, such as the bottom of a driveway or road intersection.

2. The 2nd Arriving Engine will connect to the large diameter supply line with a large diameter Siamese adapter, known as a Rural Hitch. The 2nd Arriving Engine will send its water through the supply line to the Attack Engine and then set up to receive water from a tanker. This can be done with a length of large diameter hose and a second Siamese. This will be known as the Dump Site. The 2nd Arriving Engine will maintain water supply to the Attack Engine for the duration of the event. The officer of the 2nd Arriving Engine will assume the role of Water Supply Officer if the Incident Commander has not yet assigned someone to that role.

    a. All personnel working at the dump site shall wear reflective vests.

    b. In the event the driveway is greater than 1000’ an engine should be placed in-line every 1000’ to perform relay operations. In this scenario an extra engine will need to be called to the scene.

3. A dump tank operation may be used by the Water Supply Officer either in leu of or in conjunction with a Rural Hitch, to collect water to send to the

Attack Engine. The decision to do so will be made depending on the estimate of required fire flow and the duration needed for successful incident mitigation. Large volumes of fire and expected long duration events are instances when a dump tank operation may be needed. Multiple dump tanks may be used to keep a water supply on hand to feed the Supply Engine to send to the Attack Engine.

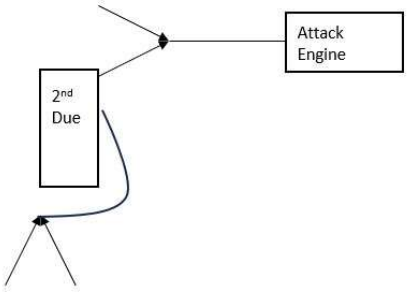
4. Multiple tankers may be used for the shuttle operations to keep up with the water needed on a scene. Consider adding alarms to bring in the needed tankers. Each alarm level brings in an additional 2 Engines, 1 Aerial, and 3 Tanker to the scene. If the tankers are the only trucks needed on scene, consider only asking for them on each alarm.

5. If a Tanker arrives before the 2nd Arriving Engine, it will hook up its large diameter Siamese adapter (Rural Hitch) and send its water to the Attack Engine. The tanker will then leave its portable dump tank on the side of the road near the dump site and then proceed to the fill site.

6. The 3rd Arriving Engine for a rural fire call will respond to a fill site location (pressurized hydrant preferred) and set up to fill tankers. The officer of the 3rd Arriving Engine will establish the role of Fill Site Supervisor if there isn't one already named by the Incident Commander. Fill site(s) should create a shuttle route with a loop to reduce apparatus backing up during shuttle operations.

    a. All personnel working at a fill site shall wear reflective vests.

    b. The 3rd Arriving Engine may be a mutual aid engine.



Water Supply Officer

- Establish and coordinate the fill site, dump site, shuttle route and/or relay operations in either hydrant or non-hydrant areas.
- Provide adequate water to the incident location as determined by incident command.
- Coordinate mutual-aid apparatus and equipment assigned to the group.
- Obtain a separate radio channel (Chiefs 280 preferred) for the tankers through incident command.
- Establish additional Fill Site and Dump Site sub-groups as needed.
- Communicate with the Incident Commander on the command channel.
- Keep Command apprised of the amount of water available upon request.
- Notify Command when the amount of water is inadequate for completion of tactical objectives and recommend the need for additional apparatus or specialized equipment (i.e., large diameter hose, portable pumps, portable tanks, high GPM capacity engines, etc.) to maintain the incident required fire flow.
- All requests for additional resources shall be initiated through Incident Command.
- Maintain responsibility for the Water Supply Group until relieved by Incident Command.
- The Water Supply Officer should be located at the dump site or next to the Command Post for hydrant operations.

Fill Site Supervisor

- Establish and coordinate fill site operations.
- Determine adequate water flow/capacity from fill site.
- Notify the Water Supply Officer if the turn-around (i.e., tanker wait time) is getting too long.
- Operate on water supply channel as assigned (Chiefs 280 preferred).
- Determine the need for traffic control at fill site.\
- All requests for additional resources shall be initiated through the Water Supply Officer.

These guidelines may be changed or altered by the Fire Chief at any time.