

The accompanying page shows a method to approach rural water supply in a systematic way. In step 1, engine 1 has laid a supply line from the last good turn-around point. This is done by one of the First Alarm Engines -- for all situations that will not obviously be controlled with water from the pumper's tank. This supply line should be a large diameter (4 inch or larger); but 2 1/2 inch can be used (with the same restricted flow results that one normally gets using 2 1/2 inch for Hydrant supply lines). This first due engine then begins its normal initial attack using its tank water. Note the 2 1/2 X 4 clappered siamese which is connected at the inlet end of the supply line. This may be carried on a Second due vehicle, if necessary.

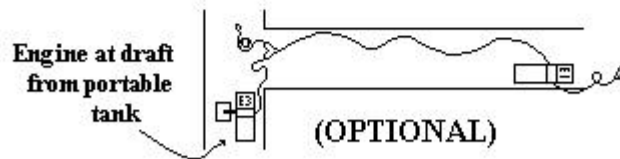
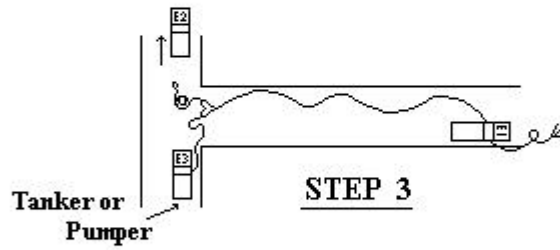
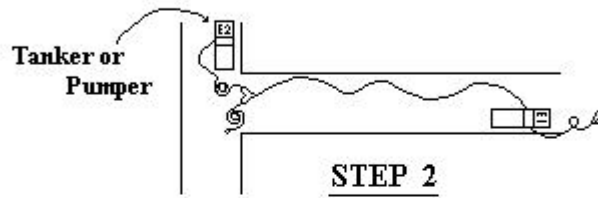
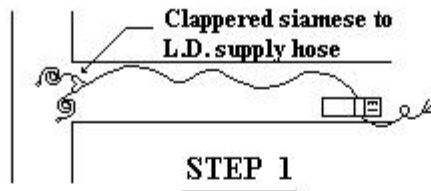
Step 2 shows the next-arriving pumper or tanker providing an immediate water supply. This unit connects to one side of the siamese and pumps off. 100 PSI discharge pressure here will supply at least 500 GPM to the attack engine via the siamese (not over 50 ft. of 2 1/2" or 3" hose) and not over 1000 ft of 4 inch hose. Larger hose sizes or shorter lengths will reduce the needed pressure. the attack engine now switches to this supply (refilling tank, if flow permits). Note the orderly transition afforded, without dependence on a priming maneuver by the attack engine.

All subsequent shuttle apparatus will connect the available inlet hose for the siamese to its pump discharge and engage pump with engine at idle and tank circulation on. This second unit will pump in when (1) the prior unit has emptied or (2) more flow rate is ordered via communication from the attack scene. Such "waiting one's turn" brings order to the evolution and provides a natural spacing of tankers in the shuttle; while supplying positive pressure to the attack engine at all times.

If a folding tank operation is desired, it is set up on one side of the Rural Hitch. Water supply is ongoing while the proper spot is selected, tank set, filled, and an engine set to draft from it. Supply to the scene is smoothly cut in just as any arriving unit would be -- via the siamese (rural hitch). Note that the water supply activity (backing and dumping tankers, etc.) is thus kept safely away from the firefighting activities. Also, we do not depend at any point on the attack pumper's (or any other) ability to switch speedily from its tank to a draft hose. Further, the attack engine can be spotted purely to its best size-up and attack purpose. There is no need to leave room at its side for a folding tank.

This procedure will be the same for any rural fire ("**Keep it simple, stupid??**"). We can switch to a portable pump or pumper relay supply at any point, and still leave the tanker, or folding tank and pumper, on the other inlet of the siamese at all times (for reliability). Sometimes the supply line will be only 100 - 200 feet long (no shorter for safety reasons of backing tankers, etc.) but the procedure is flexible enough to fit all situations. It encourages the laying of a supply line at all working fires, even when the pond is at the fire.

REMEMBER -- It's easier to pick up the line than to explain why you didn't lay it!



A folding tank may be added to the evolution if desired, at any time, without use of the narrow drive by tankers.

Table 1

Required Tanker Discharge Pressure (500 GPM)				
	Supply Line Length	200'	500'	1000'
	50ft of 2 1/2" hose, siamese, and 4 in. as supply line	60	75	100
	25ft of 2 1/2" hose, siamese. and 4 in. as supply line	45	60	85
	50ft of 3 in. hose, siamese, and 4 in. as supply line	45	60	85
	25ft of 3 in, hose, siamese, and 4 in. as supply line	35	50	75
	50ft of 3 in. hose, siamese, and 5 in. as supply line	25	30	40

Table 2

Required Tanker Discharge Pressure (250 GPM)	Supply Line Length			
	200'	500'	1000'	
	50ft of 2 1/2" hose, siamese, and 4 in. as supply line	25	25	35
	25ft of 2 1/2" hose, siamese. and 4 in. as supply line	*	*	*
	50ft of 3 in. hose, siamese, and 4 in. as supply line	*	*	*
	25ft of 3 in, hose, siamese, and 4 in. as supply line	*	*	*
	50ft of 3 in. hose, siamese, and 5 in. as supply line	*	*	*
	50ft of 2 1/2 in. hose, siamese, and 2 1/2 in. as supply line	50	90	160
	50ft of 3 in. hose, siamese, and 3 in. as supply line	25	45	75

*Pressures below 25 psi not practical. 50 psi is a recommended minimum because of potential error in gauges.
