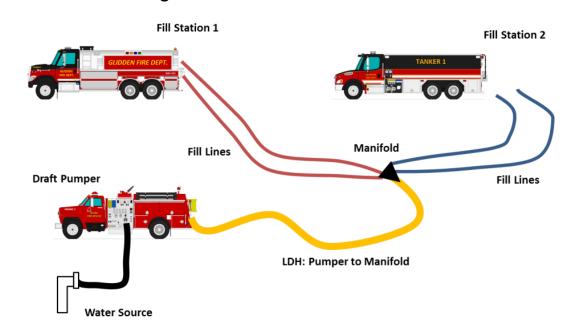
Recommended Equipment & Staffing Checklist



FILL SITE

Equipment	Dry Hydrant	Direct Draft	Pressurized Hydrant, <1000 gpm	Pressurized Hydrant, 1000+ gpm
Draft Pumper or Portable Pump(s)	1	1	1	0
Manifold (Rural Hitch)	1	1	1	1
Box or Barrel Strainer	0	1	0	0
Low-Level Strainer	0	0	1	0
Portable Tank, 2000 gal min.	0	0	1	0
Hard Suction Hose	Sufficient length to connect draft pumper to water supply source			0
LDH (4"+), pumper to manifold	Sufficient length to connect draft pumper to manifold			Sufficient length to connect hydrant to manifold
Hose (3-in and/or LDH), manifold to water tenders	Sufficient length to connect manifold to water tenders; up to 4 x 3-in lines and up to 3 x LDH lines			
Adapters	All adapters needed to make the following connections: • Water supply to draft pumper • Draft pumper to manifold • Manifold to all water tenders			
Staffing			Minimum	Recommended
Fill Site Manager			1	1
Pump Operator (not needed for strong hydrant))	1	1
Fill Site Crew			2	2-4
Traffic Director			0	1
Safety Officer			0	1
TOTAL STAFFING		3	4	6-8

Generalized Fill Site Diagram



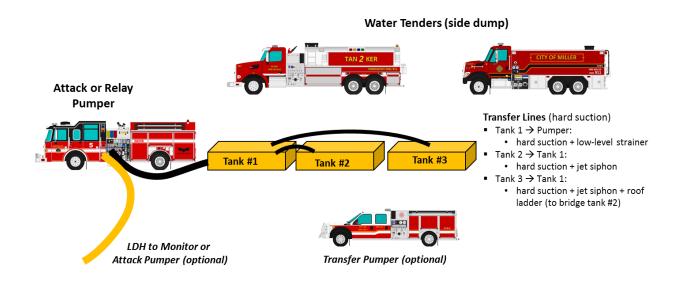
Recommended Equipment & Staffing Checklist



DUMP SITE

Equipment	1 x	Dump Tank	2 x Dump Ta	anks	3 x Dump Tanks
Attack Pumper		1	1		1
Portable Tank, 2000-gallon minimum capacity		1	2		3
Low-Level Strainer		1	1		1
Jet Siphon		0	1		2
Roof Ladder		0	0		1
Hard Suction Hose	Suff	Sufficient length to allow draft from tank #1 and transfer water from tanks #2 and #3 to tank #1			
Relay Pumper + LDH	1x needed if attack pumper will not draft directly from portable tanks				
Transfer Pumper	1 x r	1 x needed if attack/relay pumper cannot simultaneously supply jet siphon and fire flows			
Pitot Gauge	Optional to determine actual flow rates from water shuttle				
Staffing		Minim	num	R	Recommended
Dump Site Manager		1			1
Pump Operator (attack, relay and transfer pumpers)		1-3	3	1-3	
Dump Site Crew		2			2-4
Traffic Director		0			1
Safety Officer		0			1
TOTAL STAFFING		4-6	5		6-10

Generalized Dump Site Diagram

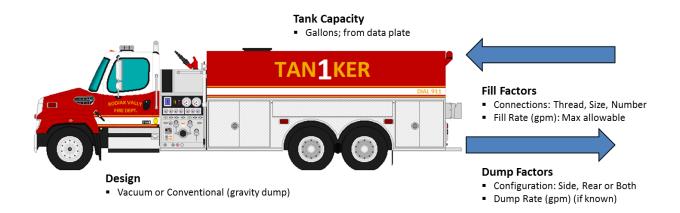


Recommended Equipment & Staffing Checklist



APPARATUS CHARACTERISTICS

Water Tenders (Tankers) Gather the following information for each water tender / tanker that will participate in the drill		
Fire Department		
Unit number or other identifier		
Nominal tank capacity (gallons); from data plate		
Design (vacuum or conventional/gravity dump)		
Fill connection(s); thread, size and how many		
Maximum fill rate (gpm); from data plate or tank warranty		
Dump configuration (side, rear or both)		
Dump rate (gpm) if known		



Recommended Equipment & Staffing Checklist



APPARATUS CHARACTERISTICS

Engines (Pumpers) Gather the following information for each engine / pumper that will participate in the drill			
Fire Department			
Unit number or other identifier			
Intake connections(s); thread and size			
Discharge connection(s); thread and size			
Maximum discharge rate at draft (gpm)			



Water Shuttle Drill Recommended Equipment & Staffing Checklist



KEY POSITIONS

Staffing Initial roster of personnel to fill key positions				
Position	Organization	Individual		
Water Supply Officer				
Safety Officer				
Fill Site Manager				
Fill Site Pump Operator				
Fill Site Traffic Director				
Dump Site Manager				
Dump Site Pump Operator				
Dump Site Traffic Director				