Fire Hydrants Along the Way



Construction Site
Water Supply Operations:
Hauling Water for Dust Control

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Facts & Figures…



- What happens when you have a major highway project where you have to control dust but have limited water supplies?
- In central Maryland, a major east-west toll road is being built to help improve traffic flow between Montgomery and Prince Georges Counties.
- The project has been a huge controversy for about 30 years but is finally underway.
- In order to manage dust control, water trucks are used to wet down construction traffic routes.
- During our travels, we found an interesting set-up for refilling these water trucks and thought we would share our findings. (Looks like a rural FF had some input on the design!)

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Water Truck #1



Not sure of the size but the rig looks to be perhaps 2,500 gallons. Paint it red and it would make a nice off-road tanker for prairie lands and logging forests.

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Water Truck #1



Of course – it would need a couple 10” or 12” dumps to make it effective in a tanker shuttle. We do like the spray nozzles – perhaps for fire line work putting down Class A foam solution.

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Water Truck #2



A more “over-the-road” friendly water truck – not sure of its size but would expect in the neighborhood of 2500 to 3000 gallons.

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Facts & Figures…



Check out the deck gun! Some fireman must have been involved in the design.

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Water Truck #2



The truck has a hydraulically driven centrifugal pump – pretty simple. Not sure of the capacity. The PTO feature allows for pump and roll operations.

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Water Truck #2



Again no dump chutes – but they are not needed for this rig's work.

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Water Truck #2



The truck is outfitted with a CamLok style fitting for the over-the-top fill pipe.

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Water Truck #2



About as simple as you can get for a pump.

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Fill Site



The fill site is actually the most interesting part of this operation. It is an elevated tank trailer designed for overhead water truck filling operations.

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Fill Site



Again – we are not sure of the capacity but probably in the neighborhood of 10,000 gallons.

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Fill Site



The tank rests on a rigid frame system pinned in place and has a vinyl-like chute for dumping water.

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Fill Site





A chain and sprocket assembly is used to open and close a BFV (a type of valve).

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Fill Site



A closer look at the chain-operated BFV and dump chute.

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Fill Site





To keep the tank full, a 3-inch hose line is connected with an automatic fill shut-off. The hose line at this site is connected to a traditional fire hydrant about 500 feet away. The tank stays full and the big water trucks get filled quickly using over-the-top filling operations.

Think of a the possibilities for rural fire protection – of course freezing is an issue – but still, just think of the possibilities!

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Fill Site



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