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Town of Webb Fire District #1
Old Forge, New York

Rural Water Supply Operations Seminar
2-hr Water Supply Drill
May 3, 2026
Summary Report

The Purpose

- The purpose of the seminar and drill was to review the basics of rural water supply operations and to practice water supply operations in a non-hydranted setting.
- The drill also allowed mutual aid companies to work together in a real-life training situation.

The Seminar

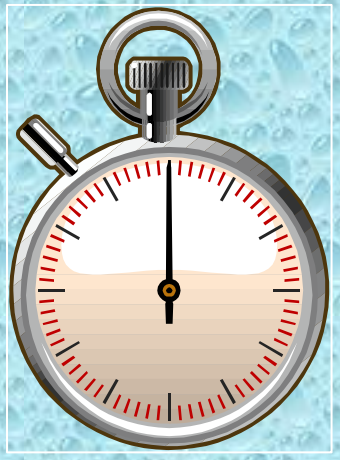
- The 2-day seminar started with a 4-hour classroom session to review the basics of rural water supply operations.
- The review session was held at the Old Forge Fire Department.
- Once the classroom part was over, the seminar continued with 8 hours of practical work on fill-site, attack tanker, and dump site operations.
- The program concluded with the 2-hr ISO tanker shuttle exercise and program review.
- Seminar participants were from the Town of Webb and Otter Lake areas.

The 2-hour Water Supply Drill

- The tanker shuttle drill was held on May 3rd at the Old Forge Recreation Center.
- The drill attempted to replicate the 2-hour Water Supply Delivery Test used by ISO in their evaluation of fire department water supply capabilities.
- While ISO no longer uses the physical demonstration of water supply delivery, the 2-hour test is still a reasonable standard by which fire departments can compare their water supply operations.
- *ISO now uses computer modeling to predict tanker shuttle flow capabilities.*

The ISO Test

- The ISO 2-hour Water Supply Delivery Test has three critical time segments:
  - 0:00 to 5:00 minutes
  - 5:01 to 15:00 minutes
  - 15:01 to 120:00 minutes



ISO Test *0:00 to 5:00 Minutes*

- A drill location is selected and the units due to respond on the first-alarm assignment are dispatched.
- Time starts when the first engine arrives on the scene and comes to a complete stop.
- There is no requirement to flow water during the first 5 minutes, but the crew must be prepared to flow water once the 5-minute mark is reached.

ISO Test *5:01 to 15:00 minutes*

- At the 5-minute mark, a flow of at least 250 gpm must be started - and it must be sustained.
- During the next 10-minutes, crews can work to further develop their water supply and increase their flow, however…
- At the 15-minute mark (5+10), whatever amount of water is flowing at that time must be maintained for the remainder of the 2-hour test.

ISO Test *15:01 to 120:00 minutes*

- Once the 15-minute mark has been reached, the remainder of the 2-hour test is really just about ***sustaining*** the flow.
- The ISO test includes the simulation of automatic mutual aid response and allows additional water supply units to arrive and assist in the delivery process as would happen on a real incident.
- The real advantage of the ISO test is that it gives a fire department the chance to see where improvements can be made in their water supply delivery process.

It is one thing to say that your fire department can deliver 500 gpm for two hours – it is another thing to prove it in a real-life drill scenario!

Water Supply Drill Participants

Participants				
Department	**Unit**	**Pump Size**	**Tank Size**	**Dump Tank**
Old Forge	Engine 517	2000 gpm	800 gal	NA
Old Forge	Tanker 325	1000 gpm	2100 gal	2100 gal
Otter Lake	Tanker 1	NA	2000 gal	2000 gal
Otter Lake	Tanker 2	750 gpm	2000 gal	2000 gal
Eagle Bay	Engine 132	1250 gpm	300 gal	NA
Eagle Bay	Tanker 315	750 gpm	2000 gal	2000 gal
Big Moose	Engine 133	1000 gpm	300 gal	NA
Big Moose	Tanker 324	1000 gpm	2000 gal	2100 gal

- *The participants for the drill were from several different fire departments in the Town of Webb region and the water hauling apparatus was representative of the type of water supply support that would respond to a structure fire in the Old Forge area.*

The Drill Begins

The drill started with Big Moose E133 (1000 gpm) laying out 300-feet of 3-inch hose attached to a clappered triamese. Big Moose and Eagle Bay tankers arrived and pumped the triamese, thus supplying water to the attack pumper. Flow was started at 250 gpm.

Dump Site Operations

Old Forge Engine 517 arrived a few minutes later and went to work setting up a dump tank operation in hopes of increasing the flow to the attack pumper.

Dump Site Operations

The plan was to build out at least a two-dump tank operation as fast as possible and be ready for the additional tankers as they arrived.

Dump Site Operations

Around the 34 –minute mark operations were switched over to dump tanks and Engine 517 took over pumping the triamese.

Dump Site Operations

Three dump tanks were now up and running and flow was moved to 500 gpm.

Dump Site Operations

A second supply line was laid to the attack pumper in order to increase flow and reduce the amount of work the supply pumper had to do.

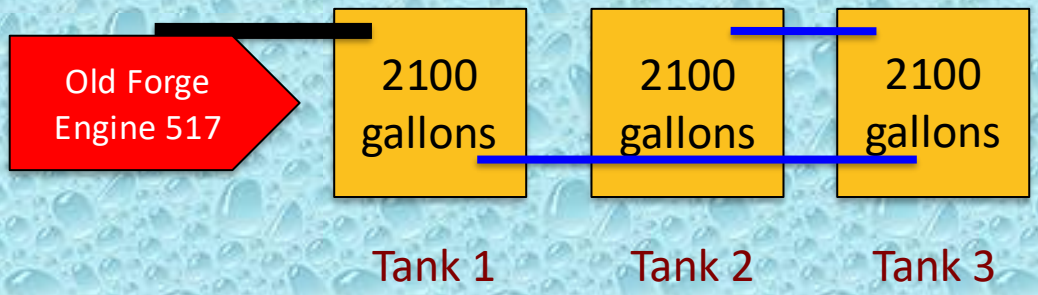
Dump Site Operations

At the 65-minute mark, flow was moved to 750 gpm; however, this had to be reduced to 500 gpm a few minutes later when one of the five tankers hauling water was placed OOS with a mechanical issue.

Dump Site Operations

The final set-up. The red and green lines were the first pumped by the tankers during rural hitch operations. Once the transition was made to dump tanks, the red line was no longer used, and all water went through the green line and the extra white line (right).

Dump Site Layout



Suction Hose

Jet Siphon

The Fill Sites

- For this drill – only one fill site was used – a bridge crossing over the Moose River.
- The fill site provided about a 1.8-mile round trip for the units hauling water.
- The river had ample water volume to support the drill, and access was not a problem.
- A 1250 gpm pumper was used to load tankers.

Moose River Fill Site

Eagle Bay Engine 132 (1250 gpm) drafted from the river at this bridge crossing and loaded tankers at a turn-around spot on the road.

Moose River Fill Site

Crews worked to set-up two loading stations and worked hard to load tankers at the 1000 gpm fill rate.

Moose River Fill Site

One person served as the “dedicated” loader. This position is important in large-scale operations as timing becomes more critical as flow demand increases in the shuttle.

Moose River Fill Site

The fill site crews used a small portable pump to bolster the fill site pumper's output capacity.

The Results

- The drill was stopped at the 114-minute mark.
- Water flow was interrupted a couple times for just a minute or so each time.
- An estimated 45,000 gallons of water were flowed through the attack pumper during the drill producing an average flow rate of 421 gpm.
- A peak flow of 750 gpm was attained during the second half of the drill. This lasted for a few minutes until one of the tankers was placed OOS, which reduced water hauling capability.

The Lessons Learned

- At this drill, crews chose to use a rural hitch operation to get things started.
- Using the rural hitch gave the crews time to get a dump tank set-up without the added pressure of having to draft and flow water right away.
- Once the first two dump tanks were up and running, the operation ran pretty smoothly.

The Lessons Learned

- The single, 3-inch supply line to the attack pumper was a limiting factor in getting additional water to that rig.
- As the flow increased, a second supply line was needed to the attack pumper.
- The use of a large body pump powered by sufficient motor horsepower at the dump site allowed one rig to supply the entire operation.

The Lessons Learned

- A tanker fill-site needs to run like a NASCAR pit stop. Anything that slows down the loading of tankers is going to reduce the efficiency of the tanker shuttle.
- At this drill, there was some variance in how one of the tankers loaded – meaning the fill connection. Had fill connections been the same for every tanker, flow most certainly could have been higher at the dump site.

The Lessons Learned

- Jet siphons, suction hose, and dump tanks are needed at most every dump tank operation – therefore, it is wise to carry those items on every tanker – as well as adaptors.

Drill Videos

Be sure to watch videos from the drill on the GotBigWater YouTube Channel.

Summary

- The drill was a success. For the new folks, they got to see how dump tank operations work.
- For the older, experienced folks, it was a chance to practice their “craft.”
- The success of the drill showed the importance of mutual aid response practices and procedures – and the importance of mutual aid interoperability.
- Many thanks to the Town of Webb Fire District #1 for sponsoring and the Old Forge FD for hosting the seminar.

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This program was developed by
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