

Training standard operating procedure: drafting from a static water supply essays...

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Drafting is a term used when water supply is raised from a source that is static and supplied to a pumper. There are several static water sources like ponds, rivers, lakes and others.

This Standard Operating Procedure aims at training fire officers from the different departments in the process of drafting, which is an essential skill in seeking to pump water from places with only static sources. The training SOP should be followed very strictly in order to avoid accidents that could be fatal at the drafting site.

The following steps and procedures were used when training officers in this skill:

- Preparation.

Officers are trained how to prepare for the process of drafting. Preparation involves an inspection being conducted on the vehicle that would be used and ensuring it is fully equipped with the necessary equipment. Officers should be trained on making connections on the hoses at the drafting site, and making sure the vehicle used is parked at a distance that will allow safe pumping.

Priming oil should be confirmed to be in the reservoir, and in enough quantities. The site of the draft should be identified and all legal aspects are looked into before drafting begins.

At the scene, officers should be taught how to check the condition of the hard-suction gaskets. These should not have any debris. A strainer should then be connected to the hard-suction hose, and enough hose sections are connected together to be able to reach the source of water.

Engine operation should be trained to selected officers to equip them with

the skills required in running the engine from the moment it is powered.

- Pumping from the Draft

At this stage, officers are trained in the main process of retrieving water from the static water source. An instructor will take a selected number of officers through training on the principles that are involved in drafting. These would be the pump operators. Familiarity with these principals is essential in drafting.

The officers will then be trained on the Principles of Lift. This is the difference of elevation that exists between the center of the pump and the static source of water. Skills on pumping air out of the fire pump and the intake hose is necessary in drafting, as this facilitates the creation of a difference in pressure between the atmosphere and the pump's inside and the hose that would be used to take in water. It is imperative to note that officers have to be trained on how to do this to ensure the pressure differential works to create pressure that is less than atmospheric pressure. This is called a vacuum.

Once the vacuum is created, due to the difference in pressure between the atmosphere and the inside of the intake hose, a force will push the water inside the intake hose. Officers should be trained in observing the pressure using the head on the intake hose as the water will continue rising until it the atmospheric pressure matches the pressure inside the intake hose, or until the pump is filled with water. The difference in how the pump sounds when there is a draft should be pointed out.

Close monitoring of the operations throughout the process is very essential.

Officers should be trained on how to notice issues that may arise, like air

leaks or entry of air into the pump. Officers should also be able to study the water level in the tank, to make sure it does not go empty, and how to notice when there is a blockage in the stainer.

Training on how to shut down when the process is concluded is important. Officers should know how to decrease the speed of the engine to idle to idle, so as to disassemble hose and the equipment used in drafting. Each operator should be able to take the apparatus through the entire evolution of drafting one time at least.

References

Drafting Operations. (n. d.). www. edgetonfire. com. Retrieved January 25, 2013, from <http://www. edgertonfire. com/Portals/0/Documents/Skill%20Drills/Drafting%20Operations%20Manual. pdf>