Fire protection hydraulics and water supply

Technology

The paper " Fire Protection Hydraulics and Water Supply" is an excellent example of a technology essay. In solving pump discharge problems when lines are laid to supply ladder pipes, there are certain things that must be done in order to overcome this difficulty. The number of lines that would be used in supplying these ladder pipes must be noted as well as the diameter and height of the pipes.

It is important to know if the ladder pipe has a permanent waterway or not as this would go a long way in solving pump discharge problems. The lateral size of the ladder pipe is also a relevant information that must be known as this would help to determine if it matches with the flow capability of the pump, so if this size does not match with the flow capability, the flow rate of the pump would be controlled that is increased in most cases so as to meet up with the flow requirement of the ladder pipe (Edwards, 2000).

The longitudinal size (height) of the ladder pipe is relevant in solving pump discharge problems as it would help to determine if the pump has the capability of discharging water through this distance and the operating pressures of the ladder pipe are of high importance. There could be some discharge problems if the pumping apparatus is not directly connected to the ladder pipe and if this is noted the pumping device must be directly connected to the 4 inches gate valve shut-off cluster (Edwards, 2000).

The reactions from heavy streams that take place at the top of the ladder are of utmost importance and if these reactions take place the pump pressure must be slowly increased or decreased as it helps to stabilize the flow of the water supplied. This would go a long way in solving pump

discharge problems as shutting the pressure off suddenly could cause a severe damage to the pumping device.