**Frequently Asked Questions**

**How do I model a groundwater pumping well?**

Represent the well as a reservoir whose head equals the piezometric head of the groundwater aquifer. Then connect your pump from the reservoir to the rest of the network. You can add piping ahead of the pump to represent local losses around the pump. If you know the rate at which the well is pumping then an alternate approach is to replace the well – pump combination with a junction assigned a negative demand equal to the pumping rate. A time pattern can also be assigned to the demand if the pumping rate varies over time.

**How do I size a pump to meet a specific flow?**

Set the status of the pump to CLOSED. At the suction (inlet) node of the pump add a demand equal to the required pump flow and place a negative demand of the same magnitude at the discharge node. After analysing the network, the difference in heads between the two nodes is what the pump needs to deliver.

**How do I size a pump to meet a specific head?**

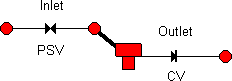
Replace the pump with a Pressure Breaker Valve oriented in the opposite direction. Convert the design head to an equivalent pressure and use this as the setting for the valve. After running the analysis, the flow through the valve becomes the pump’s design flow.

**How can I enforce a specific schedule of source flows into the network from my reservoirs?**

Replace the reservoirs with junctions that have negative demands equal to the schedule of source flows. (Make sure there is at least one tank or remaining reservoir in the network, otherwise EPANET will issue an error message.)

**How do I model a tank inlet that discharges above the water surface?**

Use the configuration shown below:



The tank’s inlet consists of a Pressure Sustaining Valve followed by a short length of large diameter pipe. The pressure setting of the PSV should be 0, and the elevation of its end nodes should equal the elevation at which the true pipe connects to the tank. Use a Check Valve on the tank’s outlet line to prevent reverse flow through it.

**How can I model a chlorine booster station?**

Place the booster station at a junction node with zero or positive demand or at a tank. Select the node into the Property Editor and click the ellipsis button in the Source Quality field to launch the Source Quality Editor. In the editor, set Source Type to SETPOINT BOOSTER and set Source Quality to the chlorine concentration that water leaving the node will be boosted to. Alternatively, if the booster station will use flow-paced addition of chlorine then set Source Type to FLOW PACED BOOSTER and Source Quality to the concentration that will be added to the concentration leaving the node. Specify a time pattern ID in the Time Pattern field if you wish to vary the boosting level with time.

**Can I use a text editor to edit network properties while running EPANET?**

Save the network to file as ASCII text (select **File >> Export >> Network**). With EPANET still running, start up your text editor program. Load the saved network file into the editor. When you are done editing the file, save it to disk. Switch to EPANET and read in the file (select **File >> Open**). You can keep switching back and forth between the editor program and EPANET, as more changes are needed. Just remember to save the file after modifying it in the editor, and re-open it again after switching to EPANET. If you use a word processor (such as Word) or a spreadsheet as your editor, remember to save the file as plain ASCII text.

**Can I run multiple EPANET sessions at the same time?**

Yes. This could prove useful in making side-by-side comparisons of two or more different design or operating scenarios.