

# Sump Pumps into the Sanitary Sewer Cause Big Problems!

Besides the fact that connecting sump pumps to the sanitary sewer is illegal, it causes big problems! Sump pumps are designed to pump groundwater and rainwater. Sanitary sewer pipes are designed to carry sewage, not groundwater and rain water.

Usually, the sanitary sewer pipe in the street is only 8 inches in diameter, and often the pipe slope is not very steep. Many 8 inch sewer pipes are installed with a slope of 0.4%. This means that for every 100 feet of pipe, the pipe goes downhill less than 5 inches. This low slope condition is very common in Pennsylvania's sewer collection systems. As you can imagine, there is only so much sewage water that can flow through this pipe

For this type of sewer pipe, about 300 gallons of water can flow through it in a minute. If more sewage than this tries to get through the pipe in the street, the sewage will surcharge, that is start filling up the sewer lateral pipes that run to the sewer main from houses. When even more sewage or extra water is sent to the sewer pipe, it will surcharge even farther, eventually pushing back into someone's basement. The sewage might come out of a neighbor's basement toilet or washing machine drain for example.

If hooked up to a house's sewer lateral, a half-horsepower sump pump will pump about 60 gallons to the sewer each minute. That means that if 5 pumps are connected to the sewer, it will be full. Normal sewage flows often fill the sewer main more than half-way already. So if two or three neighbors in a block illegally connect their sump pumps to their sewer lateral, the flow that is trying to get through the sewer main will be more than its capacity of 300 gallons per minute. The sewage in the pipe is going to start backing up!

It is critical that sump pumps discharge to the yard or storm sewer, not to the sanitary sewer. It is illegal to connect your sump pump into your sanitary lateral, and it can cause serious problems!

