CHEN.3030 Fluid Mechanics Short Quiz: The Bernoulli Equation

The water level in a tank is 20 m above the ground as shown in the sketch. A hose is connected to the bottom of the tank and a nozzle at the end of the hose points straight up as shown in the sketch. The air in the tank above the water is pressurized to 2 atm gage.

Estimate the maximum height to which the water stream could rise. Explain your assumptions and use $P_{\text{atm}} = 101 \text{ kPa}$ in your calculations, as needed.

