

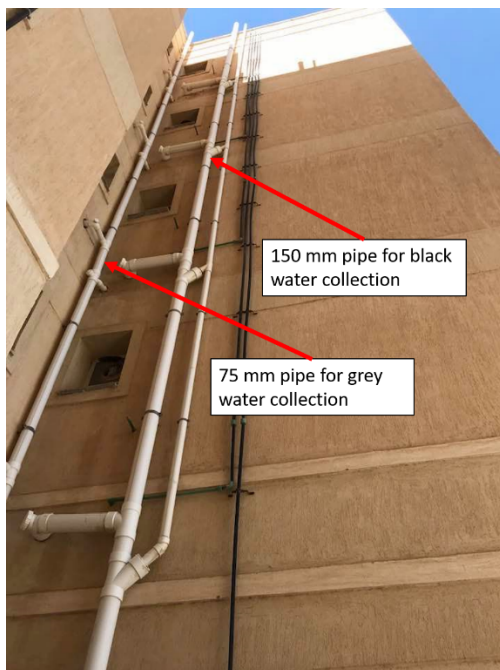
Wastewater treatment

Wastewater is collected from each floor by two pipes. A 75 mm pipe for collecting the greywater, and a 200 mm pipe for collecting the black water. Both of them enters the inspection chamber and merged into one pipe, conveying to the sewerage system.

Wastewater collected from the laboratories may contain hazard chemicals, so, its separated in containers and avoided from disposal into the sewerage system.

Part of the sewage/wastewater is conveyed by pipes to the public sewer system, which is finally received by a wastewater treatment plant (WWTP) located in Borg El-Arab City.

Another portion of wastewater (about $120 \text{ m}^3/\text{d}$) is transferred to a sand filtration system which is installed at the EJUST campus (attached photo shows the sand filtration system). The sand filters have a filtration rate of $9 \sim 11 \text{ m/h}$, water production = $7 \text{ m}^3/\text{h}$, and compressed air pressure = $0.1 \sim 0.5 \text{ MPa}$.



Collection of wastewaters (separate pipes of grey and black water) from each flat



Wastewater collection into the inspection chamber, and then transferred by underground drainage pipes into the public sewer system



Sand filtration system to treat portion of wastewater (120 m³/d) at EJUST