

Excursion to Sewage treatment plant

Water Board Company Limburg is a subsidiary of Water Board Limburg and has 17 sewage treatment plants throughout the province of Limburg. Annually, a total of around 150 million m³ of waste water is treated here. This waste water comes from Limburg households and companies that are connected to the transport sewer. Everyone uses around 130 liters of water every day. To shower, flush the toilet, do the dishes, etc. Companies also use and pollute water. All that wastewater from Limburg households and businesses disappears into the sewer and is transported to one of the 17 sewage treatment plants of Water Board Company Limburg to be purified. The purified waste water is discharged into surface water. The water contains poo and pee, but also soap scum, hair, sand, toilet paper, medicines, food rests and lots of other stuff that doesn't belong there. To clean this water some (4) steps have to be taken.

Bulky waste disposal: Great things such as diapers, toys, cans, everything bigger than a green pea, is removed from the wastewater with the help of grids (sieve).

Pre-sink: The heavier particles such as sand, food waste and poop waste fall to the bottom in the pre-settling tank. The lighter particles such as fats and oils that float upwards. All light particles are skimmed off with the sweeping arm on top. These particles are brought to the sludge fermentation. Everything that sinks to the bottom is called sludge.

Biological cleansing: Bacteria, active sludge, eat small organic dirt.

After-sink: The activated sludge is separated from the purified water in the settling tank. The activated sludge sinks to the bottom. The purified water is then ready to return to nature as surface water.

With the help of yeast, the organic waste in the sludge is further broken down and converted into biogas. This biogas is used to provide the sewage treatment plant with electricity and heat. Due to this process energy will not get lost.



The students have become aware that they use a lot of water per person. Together we talked about ways to reduce this water consumption.

