

Organics degradation

„semi-stationary“ Sewage Plant, Cox’s Bazar, Bangladesh

Sewage treatment in refugee camp for about 5 - 6,000 people



Refugee camp „Balukhali II“ in
Cox’s Bazar / Bangladesh

Operation

1 OLOID Type 400 + 1 HydrO2
1000

2 Oxfam Tanks with each 45 m³

Period

Since 09/2018

Success

Reliable odour removal

COD degradation by 90 %

E.Coli reduced to legal value

Goal of the OLOID operation

In the refugee camp "Balukhali II" in Cox's Bazar in Bangladesh with 1.1 million escaped Rohingya from Myanmar, build a working pilot plant for wastewater treatment from pit latrines. Since the camp was created in a hurry, there is no infrastructure available. The daily volume of sewage from the pit latrines is about 5 million litres, so in these dimensions standard procedures such as e.g. composting, anaerobic digestion or lime stabilization do not help.

Activities

Planning for the pilot plant began in summer 2017. In September 2018, the practical implementation and construction of the plant began. Since then, this plant has been treating the waste water of about 5,000 - 6,000 people. So far, this plant is used purely for organic degradation, if necessary this will change in the future. Similarly, the real plant will be designed to double.

Success

The plant does not create any odour nuisance. The COD reduction is around 90%, the entire plant reduces parasites by 100% and E.Coli to the legal discharge value for Bangladesh. The total energy requirement is 1,650 watts when the ventilation by the HydrO2 is switched off during pumping.

See also the YouTube videos:

https://youtu.be/EkvzrHI8_Rg

<https://youtu.be/Tp5vGxwWOWE>

A project of our project partner Saygin engineering.

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