

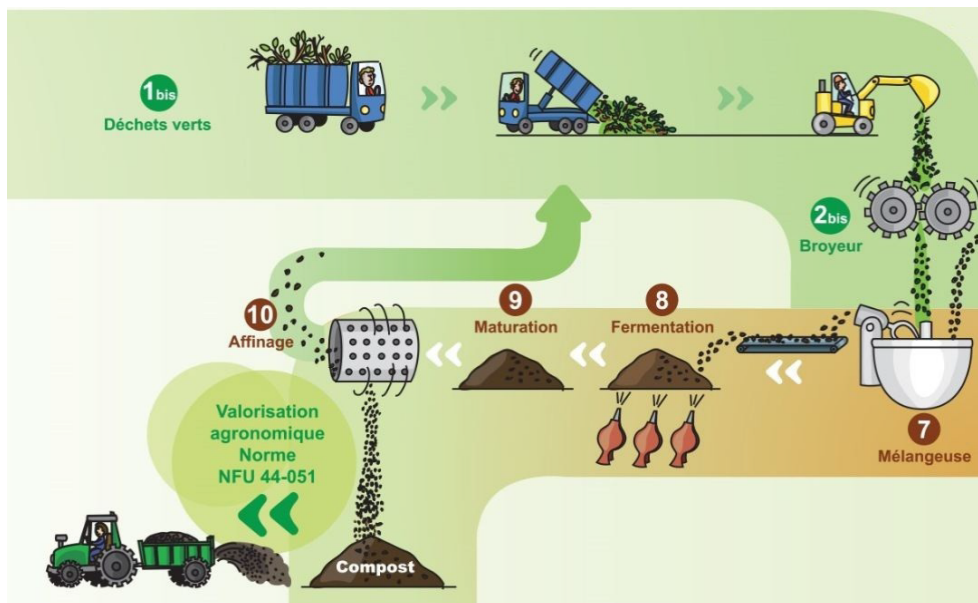
Compost juice and leachate juice

Compost juice

The compost is a biological process of the organic rubbishes transformation. This aerobic process produces a fertilizing matter rich in humic composites: the compost.

The compost aerobic process needs that the treated rubbishes enable a sufficient air circulation. This factor is vital because the air must take 50% of the final volume. About the anaerobic process, it begins when the compost heap has an oxygen level lower than 10%.

During this process, the temperature can reach 80°C before getting back to the ambient temperature.

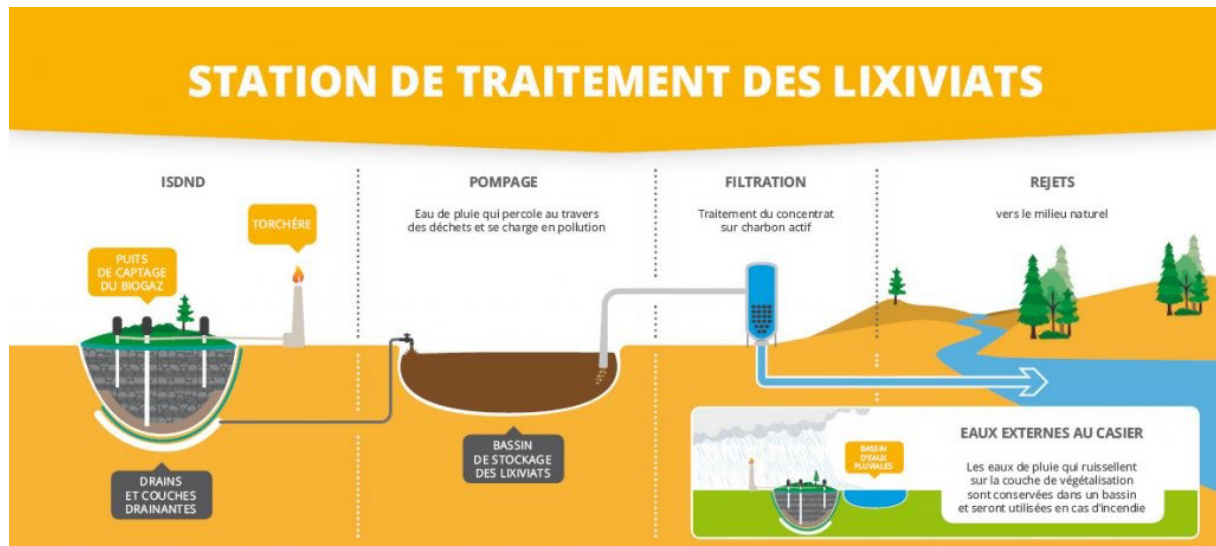


Leachate juice

The leachate juice is the residual liquid providing from the percolated water on rubbishes. This water is full of pollutants.

Leachate must not be rejected without being treated because they are strongly concentrated in pollutant elements (organic load, organic micro-pollutants, heavy metals, mineral composites...).

Moreover, it has been proved that the organic composites responsible for a pollutant load are present in leachate (such as volatile fatty acids, sulfured products, amino acids, micro-pollutants...). Thus, it is very important to treat and collect that leachate before rejecting them into the natural environment.

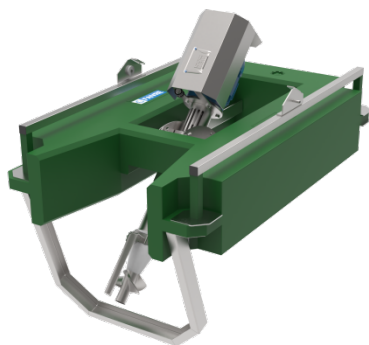


Why is it necessary to aerate these juices?

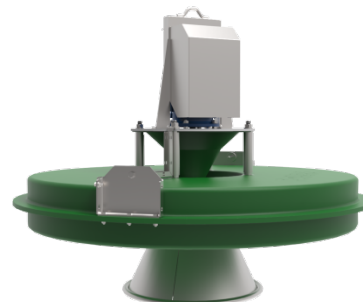
The aerobic compost needs an important oxygen supply. Indeed, if the oxygen is not high enough, the growth of the aerobic microorganisms is limited and it slows down its decomposition. Moreover the aeration enables the regulation of the heat and will eliminate the vapor and gas trapped into the compost heap. It reduces the risk of fire due to the overheating of the compost heap that is why the aeration is indispensable for efficient compost.

Finally, the aeration is also inevitable to enable the rejection of leachate in the natural environment while respecting the rejection rules. Indeed, the ministerial decree of September 1997 rules the CSDU exploitation (an Old Waste Storage Site) and fixes the conditions of the leachate rejection into the natural environment. These effluents cannot be rejected into the natural space if they do not respect the values fixed by the article 36 of this decree. Otherwise, they risk juridical penalties.

For over 60 years of experience in water treatment, our society has made several machines for compost and leachate treatments. The hydro-ejector HYDROPULSE, with a vacuum turbine and the surface aerator FLOPULSE are ideal for leachate treatment.



Representation of HYDROPULSE



Representation of FLOPULSE