Mintox

Microbial nitrogen conversion when breaking down waste (Mintox)

The aim of the project is to investigate the long-term effect of aeration on the nitrogen balance of MSW landfills. For this purpose, landfill simulation reactors are operated under aerobic and anaerobic conditions and all nitrogen emissions as well as the nitrogen pool remaining in the reactors are recorded in terms of type and quantity. Thereto detailed material balances are established. In order to determine the importance of the individual nitrogen conversion processes, incubation tests with stable isotopes (15N) are carried out in addition to the reactor tests. Furthermore, the microorganism populations involved in the nitrogen conversion are determined qualitatively and quantitatively.

>> Project characteristics