

Improve discharge values

Compost plant Hochhäckerstrasse, Munich, Germany



Kompostanlage Hochhäckerstrasse München

Operation
2 seepage basin 350 m³ with OLOID Type 400

Period
5 weeks in 2006

Success

- Reliable odor elimination
- Improvement of discharge values

Goal: Elimination of bad odours and Improvement of discharge values, in-levitation attitude of the sludge

Test: 5 Weeks test period with weekly analytical evaluation

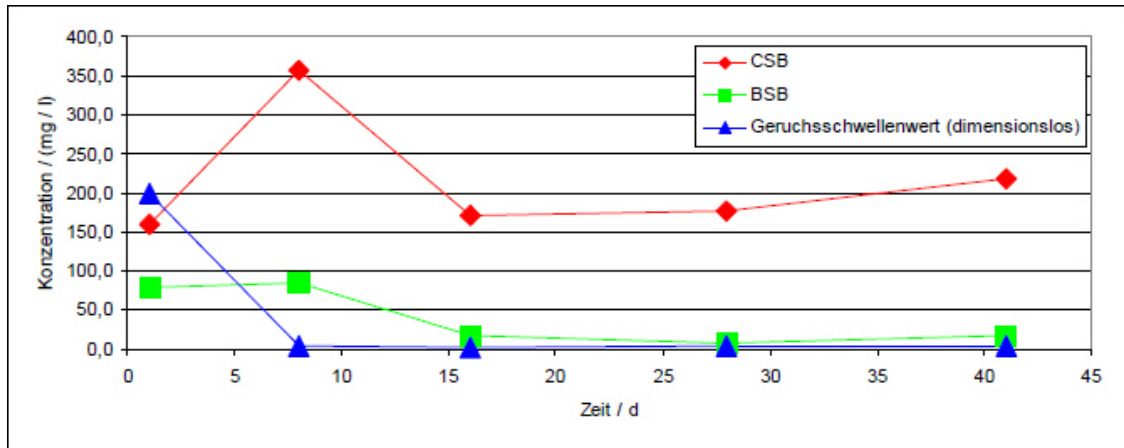
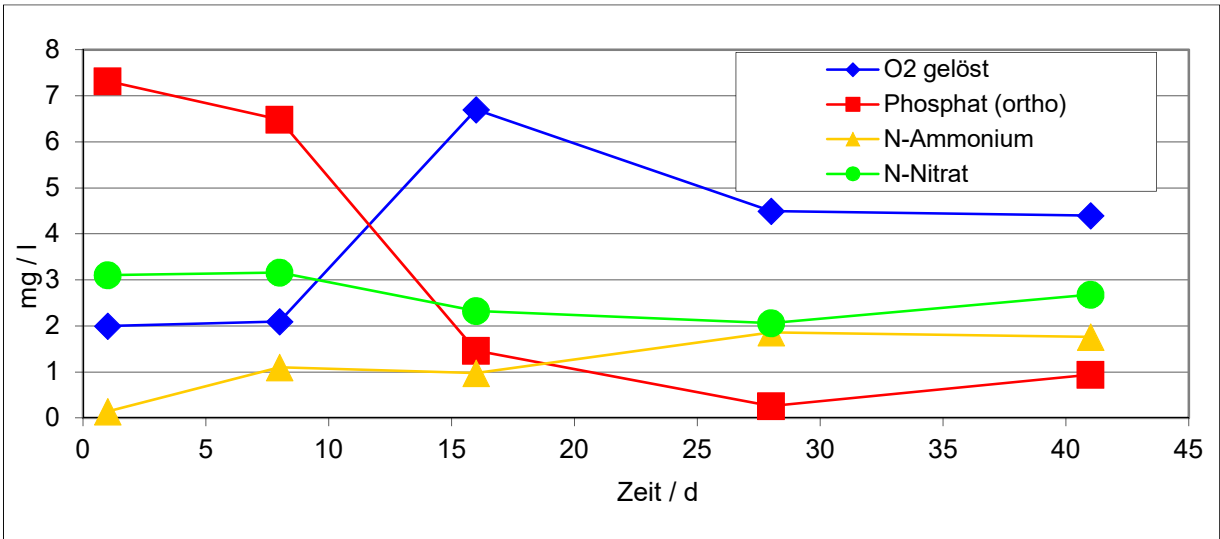


Chart 1: Evolution of COD, BOD and the odour threshold when using the OLOID

The odour threshold value falls within the first week of 200 to values less than 5, where it then also stabilizes. The BOD also falls within the first 3 weeks, and stabilizes below the threshold of 25 mg/l (see Chart 1).



The dissolved oxygen content stabilizes after 3 - 4 weeks at a level of 4 mg/l, which corresponds approximately to twice of the initial value of about 2 mg/l. The content of phosphate decreases from 6 mg/l in a first phase to values below 2 mg/l, and then stabilises at 2 mg/l. The nitrate concentration decreases slightly, and accordingly to the ammonium nitrogen content increases slightly (compare with Figure 2).

Result:

By using the OLOID, odour emissions can be greatly reduced within a week and the threshold for BOD is not reached and maintained within the first 3 weeks. The oxygenation of the proportion of dissolved oxygen can be more than doubled and the proportion of the phosphate is reduced to about one third. Also an increased conversion of nitrate to ammonium takes place.