

Case study
Speciality chemistry



GOAL: To abate more recalcitrant COD: complex nitrogenous molecules such as hexamine and DMEA.

TECHNICAL DATA:

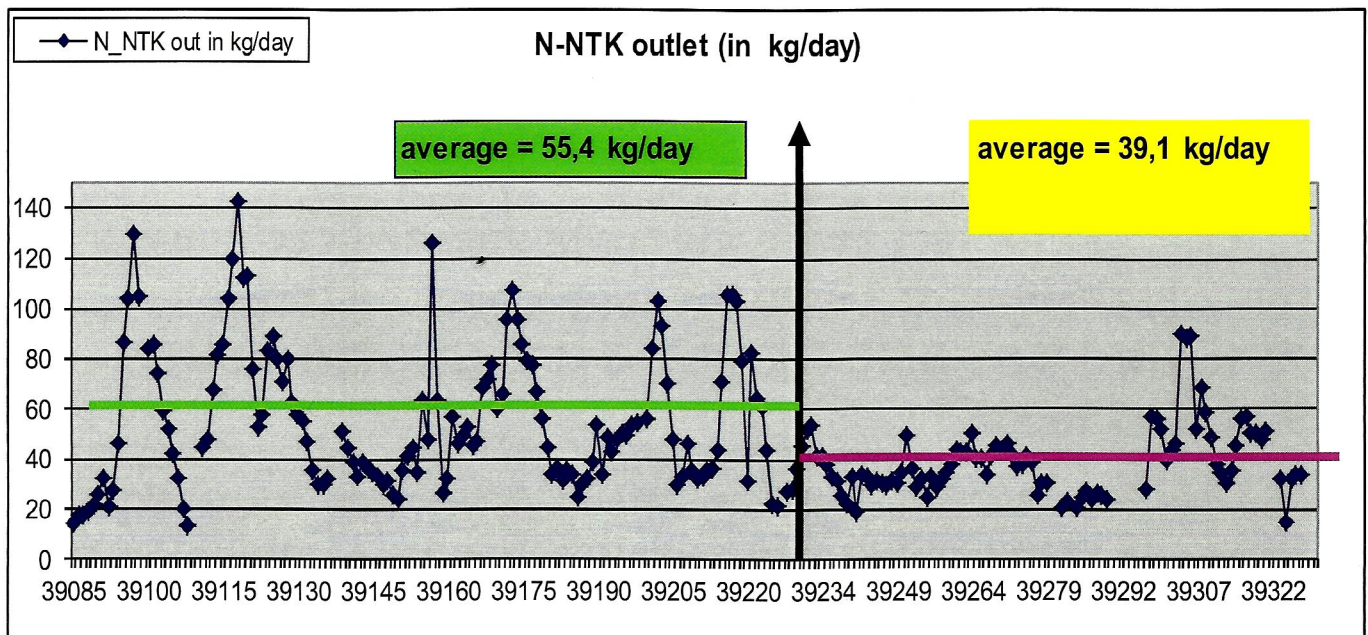
1st high-load stage comprised of two stepped basins of 7500 and 3000 m³, 2nd 3000 m³ nitrification stage, 20 to 50 T COD/day



RESULTS:

➡ DMEA and hexamine elimination is increased by a factor of 1.7: the plant's upstream production capacity is thus increased.

➡ N-NTK release is reduced by 29%.



**We have taken recalcitrant COD
abatement even further!**

**PILOT BATCH TESTING OF ANTI-DMEA
AND/OR ANTI-HEXAMINE MICRO-
ORGANISMS**

**We have more than 500 strains in our FUNGAL
LIBRARY**

PRINCIPLE

Tests conducted on the customer's premises, in pilot settings reproducing the conditions of the waste water treatment plant (sludge age, effluent composition, temperature, etc.)

**THE VARIOUS MICRO-ORGANISMS
TESTED ARE ADDED TO THE TRIED AND
TESTED FUNGAL COCKTAIL**

PILOT TESTS

The first two tests were conducted with the initial fungal cocktail supplemented with a yeast: *kluveromyces*.

The results are compared to a control treated with the fungal cocktail alone.

Pilot test results

After 13 days: the % COD abatement is of:

39% for the control

52% for test 1 with the supplemented cocktail

51% for test 2 with the supplemented cocktail

**THIS IS THE FIRST TIME THE PLANT HAS OBTAINED SUCH
EXCELLENT RESULTS**

**A full-scale test, spanning several months, was conducted with
the new KLUYVEROMYCES-supplemented cocktail.**