

## Reference: Scania Lorry Wash System

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**Product:** Biosa Composter

**Country:** Denmark

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**Problem:** Scania washes 4-5 lorries every day. A large amount of the water that is used is rainwater, collected in big tanks through drainpipes collecting the rainwater from the whole property (also from the gutters). As it takes a large amount of water to wash the lorries, the dirty water is recycled, creating a closed recycling system. Clean tap water is added to the system when needed. Before the water can be used for washing, it is led through a filtering system with three layers of sand with different grain sizes and one layer of active carbon (a total of 625 kg). The cleansed water is added car shampoo and then used for washing the lorries. The dirty water runs through an oil filter and is then re-collected in the rainwater tanks.

Due to the heavy pollution from the lorries, the water becomes very polluted with organic matter, starting a bacterial decomposition, which causes foul odours. These nuisances are very annoying both for the people working at Scania and for the lorry drivers.

Approximately 70 litres of water are used with every washing and the foul smell from it gets stuck to the lorry. In addition, it is very costly to change the bio filters, which has been necessary every three months. The company has tried to get rid of the problem in all ways through adding chlorine to the water. This had to stop again though due to health risks.

**Dosage:** All the problems were solved through installing a 1000 litre aerobe tank containing a BioReco constantly oxidising the water and through adding microorganisms – Biosa Composter – to the whole system. 35 litres of activated Biosa Composter are added to the system (30m<sup>3</sup>) every week, equivalent to 1 litre per m<sup>3</sup>. In the case of Scania the microorganisms are added to the aerobe tank containing the BioReco. As the system is a circuit system, the Biosa Composter can also be added at a different point e.g. in the anaerobe tank. The BioReco measures 30 cm and weighs 13,6 kg. It requires a water depth of minimum 55 cm and is attached to the wall of the tank. The installation at Scania has proven to work optimally with a flow speed of 600 litres per hour. These figures depend on the actual circumstances and can vary from case to case.

Our experience shows that an optimal working system needs to contain both oxygen rich zones (BioReco) and oxygen poor zones (e.g. a storage tank) to activate both the aerobe and the anaerobe bacteria. It is important that all disinfective and anti bacterial precautions e.g. addition of chlorine or ozone are stopped before the treatment with microorganisms starts.

**Results:** The combination with both the BioReco and the Biosa Compoter creates a very efficient technology. A technology that is simple, flexible and cost efficient to install. It is used to remove odour nuances in many existing wash systems and can also help to totally avoid the problem in new established plants.