

## Fresh air saved neighbourliness in Skjern

Fresh air blown along the bottom of a tank containing wastewater from Skjern Papirfabrik (paper mill) has saved far more than just the neighbourliness with the town of Skjern. During several years the tank contents have produced an odour similar to that of rotten eggs, and as time went on the number of protests from the »odour-plagued« citizens created a mood in the media which almost made the factory give in, even though more or less all possibilities of reducing the odour nuisance had been tried. No known method could eliminate the stench.



»We were aware that the situation was completely precarious and that we had to do something. If not, we could expect authority interference«, says Head of Laboratory, Lene Lange Andersen, from Skjern Papirfabrik.

»During that phase we had to be unconventional. We knew that it was possible to reduce the odour nuisance by adding oxygen, thus providing better working conditions for the microbes. We just did not have the system for it. Slightly desperate we accepted an offer from Landia to try to aerate the tank contents by means of an aeration system originally designed for wastewater aeration under particularly difficult conditions. Within a few days Landia produced and supplied two pumps with aeration equipment, and since the design allowed installation in full tanks we were able to start right away. Our hands were shaking, but it turned out to be a success.«

In short, the system consists of one or more pumps equipped with so-called ejectors (which look like a Harley Davidson exhaust pipe) being lowered to the tank bottom. There the ejectors blow air along the bottom, thus creating millions of small air bubbles.

»We began with two aerators and by the following day the stench had been reduced considerably«, says Lene Lange Andersen.

Now, Skjern Papirfabrik has 5 pumps in the same tank, and the odour nuisance problem from the paper mill in the town of Skjern has completely vanished.

## ■ Off-spin

Not only did the aeration system eliminate the stench by efficient aeration of the tank contents. Actually, it also brought along some off-spins which please the Head of the Environment and Energy Dept. at the paper mill, Mr. Søren Bæk.

»First of all the wastewater for our treatment plant has become cleaner and we do not have to use so much energy for preparing it for final treatment at the town's treatment plant. It was well-timed since the wastewater impact had just been imposed with new and stronger regulations. It turned out that relatively easy we could treat the wastewater in accordance with the new requirements.

- Secondly, we could remove the sludge in the tank, simply by letting one of the aerators point directly into the part of the tank where the tank contents normally settle. I know what I'm talking about, as in connection with an earlier tank cleaning I removed 12 cubic metres of sludge from the bottom. This is no longer necessary at all«, says Søren Bæk.

»It feels good to walk the streets of Skjern again without being accused of being related to a stinking factory. Several of the former complainants now praise the solution with the Landia aerators. Now the people of Skjern can make outdoor barbecues and hang out their laundry. A smile is much nicer than a sullen look«, says Lene Lange Andersen.



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