

EnzymeKleen_™ Industrial

CASE STUDY - Animal skin processing effluent pond

Challenge/ Opportunity

Over several seasons an animal skin processing plant encountered difficulty in the management of the aerobic effluent pond performance. The aerobic bacteria is digesting the effluent slowly resulting in accumulation of organic waste, odour problems, high foam, high sludge and many assorted problems. During these times it would take days and sometimes weeks for the pond to recover. The pond would obviously recover over the weekend and would then receive a shock dose of effluent on Monday.

Effluent pond was treated with Enzyme *Kleen* Industrial and dose at in feed end, where the pH is stable at pH 7.8. During five weeks of treatment production was at its maximum. Over the first week a noticeable improvement in performance was observed. During that peak 5 weeks no bad performances were recorded. Foaming ceased and surface sludge has also disappeared along with odour issue.

Before Treatment

Effluent pond capacity reduced due to organic waste not digesting quickly. Sludge forming, foaming and odour issue.

Treatment with Enzyme Kleen™ Industrial and results:

- The Pond was given an initial shock dose of 200 litres of Enzyme *Kleen* Industrial per million Litres (200 ppm) of effluent contained in the pond.
- Week 1 the in-coming waste stream was treated with one litre of Enzyme *Kleen* Industrial per 20,000 litres (50 ppm) of effluent added.
- Week 2 the in-coming waste stream was treated with one litre of Enzyme Kleen Industrial per 50,000 L (20 ppm) of effluent added.
- Week 3 onwards the in-coming waste stream was treated with one litre per 100,000 L (10 ppm) of effluent added.

Benefits from use of Enzyme Kleen™ Industrial:

- Certified organic and biodegradable which does not impact the environment
- Efficient digestion of organic waste.
- Efficient removal of odour, organic waste, grease and sludge.
- Stays active for 14 days.
- Easy to dilute and dose.
- Cost effective and less chemical to handle as product is a concentrate.
- Safe to handle and protects workers from harmful chemicals.
- Sustainable product as it is made from sugar molasses.
- No post treatment issue with waste water.



NZFSA Approved C32 (All animal product except dairy)

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