

## BiOWiSH® POME

### BiOWiSH® POME Helps Reduce Surface Scum & COD in a Palm Oil Mill Plant in Indonesia

#### Background

At the end of 2018, a palm oil processing plant in Belitung Island, Indonesia saw their daily processing load jump from 300 ton/day of fresh fruit bunches to 700 ton/day. This sent their average 150 m<sup>3</sup>/day of wastewater generation soaring to 400 m<sup>3</sup>/day, leaving existing treatment infrastructure under enormous stress to meet discharge standards.

#### Objective

CV Abatemen Karya Bersama, an authorized distributor of BiOWiSH Technologies in Indonesia, proposed treating one of the ponds in the treatment plant with BiOWiSH® POME for a duration of 2 months. The main objective of this trial was to reduce the high levels of COD and break down the surface scum.

#### Solution

Once a week, 10 kg of BiOWiSH® POME was dissolved in 200 L of water and sprayed across the pond surface. The selected pond was 10,000 m<sup>3</sup>, with a COD of 25,000 mg/L, and pH of 5.7.

### BiOWiSH® POME



- Accelerates the decomposition of organic waste (sludge)
- Preserves pond hydraulic capacity and treatment outcomes
- Degrades surface crust to improve pond natural aeration
- Reduces odor emissions

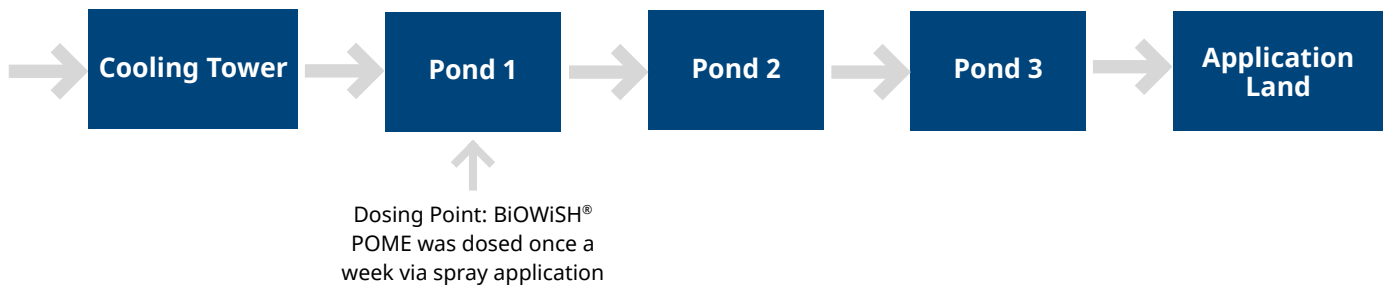


*Pond selected for trial*



*BiOWiSH® POME dosing via spray application*





## Results

Within the first 3 weeks of dosing BiOWiSH® POME, staff reported a significant change in the consistency of the floating scum at the surface of the pond. Results can be clearly observed in the images below:



*Before BiOWiSH® treatment*



*After 3 weeks of BiOWiSH® treatment*

After two months of continuously dosing BiOWiSH® POME, the plant operator confirmed that the COD was reduced by 86%. He was highly satisfied with the results as the COD levels were well below the discharge standards. After this successful trial, the management decided to apply BiOWiSH® POME in all the ponds across the treatment unit.

After the initial trial period, the plant added a one-time shock dose, 10 kg of BiOWiSH® POME, to all three ponds. Now, they continue treatment by adding 5 kg/week of BiOWiSH® POME to Pond 1.

## Conclusion

BiOWiSH® POME application reduced surface scum and COD levels in the treatment ponds. Bioaugmentation with BiOWiSH® POME allowed the palm oil mill operator to manage a 130% increase in production volume with no need for any capital expenditure in their existing waste treatment lagoon system.

Thanks to BiOWiSH®, the existing system is currently performing better than it did before the production bump.

## Contact Distributor in Indonesia



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1532-01-EN

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