

# **Case Study**

# **BiOWiSH® Odor**

# **BiOWiSH® Reduces Odor from Karnataka Compost Development Corporation Site in Kudlu, Bangalore**

### Background

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Karnataka Compost Development Corporation is involved in environmentally friendly treatment of city garbage and agriculture waste through production of compost-based organic manure and vermicompost. The site receives approximately 90 tons of fresh municipal solid waste (MSW) every day and can have 25,000-30,000 tons of waste inventory at various stages of converting to compost.



KCDC Composting Facility - Kudlu, Bangalore

### Objective

The main objective of this study was to highlight the importance of application methodology and the significance of complete coverage while spraying BiOWiSH<sup>®</sup> Odor to reduce odor during the composting process of municipal solid waste.

### **Implementation Program & Results**

The trial was conducted on 50 tons of fresh municipal solid waste. A remote location was chosen to minimize the interference of odors coming from the main location.

### **BiOWiSH® Odor**



- Removes rather than masks odors
- Fast acting
- Effective on a wide range of volatile organic compounds (VOC)
- Cost effective
- Operative at low dosage rates
- Long residual effective period
- Natural and non-toxic

#### **Available Sizes**

- 100 g/3.5 oz
- 1 kg/2.2 lbs
- 5 kg/11 lbs
- 10 kg/22 lbs

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The following dosing pattern was followed during the trial duration:

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Day	BiOWiSH® Odor	Dosing methodology	Results
Day 1	100 g	10 T of fresh waste was unloaded on site. 100 g of BiOWiSH <sup>®</sup> Odor was mixed with 30 L of water and sprayed on this 10 T waste pile. A bucket and a plastic cup were used for spraying BiOWiSH <sup>®</sup> Odor solution on the waste pile.	No change in odor reported by field personnel
Day 2	100 g	10 T of new waste was unloaded onsite. 100 g of BiOWiSH® Odor was mixed with 30 L of water and sprayed on total 20 T of waste pile.	No change in odor reported by field personnel
Day 3	100 g	Since significant reduction in odor was not observed on the first 2 days of trial, it was decided not to unload any more waste on site.	No change in odor reported by field personnel
		<b>Conclusion:</b> Complete coverage could not be achieved using a bucket and cup.	
		<b>Change in dosing methodology:</b> 100 g of BiOWiSH <sup>®</sup> Odor was mixed with 100 L of water and sprayed on the existing 20 T of waste pile with the help of spraying machine mounted on wheels.	
Day 4	100 g	100 g of BiOWiSH <sup>®</sup> Odor was mixed with 100 L of water and sprayed on the existing 20 T of waste pile with the help of spraying machine mounted on wheels (3-wheeler auto).	Proper spraying mechanism ensured complete coverage of waste area. Significant reduction in odor was observed.
Day 5	100 g	100 g of BiOWiSH <sup>®</sup> Odor was mixed with 100 L of water and sprayed on the existing 20 T of waste pile with the help of spraying machine mounted on wheels (3-wheeler auto).	During the inspection on the 5 <sup>th</sup> day, complete odor reduction was reported. Turning of waste also generated very minimal odor and when sprayed with BiOWiSH <sup>®</sup> Odor after turning, it was able to eliminate the odor immediately.
<b>Trial 2:</b> On 30 tons of fresh waste. The objective of this trial was to check, confirm, and conclude the duration required by BiOWiSH <sup>®</sup> Odor for reducing odor on the waste pile.			
Day 1	200 g	30 T of fresh waste was unloaded on site. 200 g of BiOWiSH <sup>®</sup> Odor was mixed with 100 L of water and sprayed daily on 30 T of waste pile with the help of spraying machine mounted on wheels (3-wheeler auto). <b>Note:</b> the waste pile was turned on daily basis and solution of BiOWiSH <sup>®</sup> Odor was sprayed again every time the waste pile was turned	Significant odor reduction was observed on day 2 of spraying BiOWiSH® Odor on 30 T waste pile. The trial was concluded on day 3 after ascertaining from the plant personnel that the odor had been reduced significantly and was well under control.
Day 2	200 g		
Day 3	200 g		



Waste being unloaded



BiOWiSH<sup>®</sup> Odor dosing via bucket + cup approach



Waste being turned



BiOWiSH<sup>®</sup> Odor dosing via spraying machine mounted on wheels

### Conclusion

The trial conducted at KCDC – Kudlu, Bangalore proved highly successful. BiOWiSH<sup>®</sup> Odor was able to significantly reduce odor. This trial also highlighted the importance of correct application methodology and the significance of complete coverage while spraying BiOWiSH<sup>®</sup> Odor.

The KCDC management was so impressed with the performance of BiOWiSH<sup>®</sup> Technology, they have become a loyal customer. They decided to contact InNow India Pvt Ltd, BiOWiSH's local partner in India, to order BiOWiSH<sup>®</sup> Odor, and have continued to use BiOWiSH<sup>®</sup> Technology ever since the trial.



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