

BiOWiSH® Odor Control

Reducing Odor Emissions From Solid Municipal Waste, Thailand

Background

On 19th January 2006 air quality analysis was conducted on garbage fermenting tanks at the On Nut Garbage Disposal Plant operated by the Department of Public Cleaning of Bangkok Metropolitan Administration.

Sampling and analysis was performed by Environmental & Resource Development Co. Ltd. The purpose of the sampling was to assess the effectiveness of BiOWiSH® Odor in reducing odor emissions from the solid municipal waste and its impact on local residents.





Bangkok Metropolitan Site

Testing

Sampling was undertaken prior to application of BiOWiSH® Odor and then again 10 minutes following the application.

The table below shows the tests completed:

Parameter	Sampling Method	
Hydrogen Sulphide	Impinger / Titration	
Methyl Mercaptan	Sampling Bag / G.C.	
Total VOC's	Photo Ionization Detector	

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

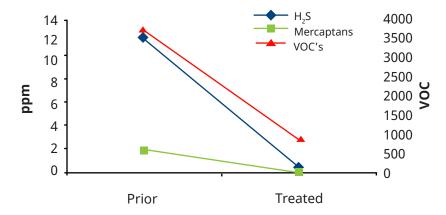
Available Sizes

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

Application

BiOWiSH® Odor was mixed into solution at 3.5oz to 26.4Gal or 1,000ppm (100gm to 100L of water) and the solution was sprayed to the surface of the fermentation tank. Samples were taken for measurement of hydrogen sulphide, ammonia and odor values directly prior to treatment and at 10 and 40 minutes.

Index	Prior to Treatment (ppm)	Treated with BiOWiSH® Odor (ppm)	Reduction (%)
Hydrogen Sulphide	12.330	0.319	97.4%
Methyl Mercaptan	2.01	0.12	94.0%
Total VOC's	3,756	956	74.5%



Conclusion

The result of over 18 years of research and development, BiOWiSH® is a powerful blend of biocatalysts that breaks down complex organic molecules to help eliminate waste, reduce odors, improve soil fertility and enhance water quality, among other uses. 100% natural and non-toxic, BiOWiSH® is safe for everyday use in a wide range of consumer and industrial products. It has been proven to solve problems in environmental management (including wastewater, solid waste, soil and water remediation and industrial emissions), as well as agriculture. BiOWiSH® products are used extensively and available in Asia, Australia, Europe, North America and Latin America.

Developed specially for the solid waste industry, BiOWiSH® Odor digests organic compounds that cause noxious odors including ammonia, hydrogen sulphide, amines, mercaptans and a wide range of volatile organic compounds (VOCs). BiOWiSH® Odor also accelerates composting time and improves leachate water quality.



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