



## **Compost odor pollution control**

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Composting is a technique for converting organic material into a product suitable for land application without adverse environmental effects. A major problem in composting is the odor caused by the release of ammonia. Ammonia (NH<sub>3</sub>) is a byproduct of aerobic composting. In order to remove odorants from compost many researches and developments have been carried out to confirm reliable technique. In this paper investigates the way of odor pollution control. Bio filtration is a compost odor reduction technique that can be adapted to reduce emissions from composting process. Bio filter with 20% wood chips, 10% clay and 70% manure compost by weight mixture had 100% removal efficiency a media depth in the 500 mm for ammonia odor removal from composting. Compost that is properly made under aerobic conditions will have an earthy aroma that is not offensive. However, partly decomposed feedstock's or poor composting techniques can generate problematic odors including ammonia, hydrogen sulfide (the smell of rotten eggs) and volatile fatty acids (VFAs). Identification of the source of the problem is important because the actions required to remedy each of these problems will differ. Ammonia can also be generated when carbon has been supplied to the piles in particles that are too large. In either of these examples, there is too much nitrogen in the original mix for the amount of available carbon (C: N ratio).

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