

Using Compost for a Safer Environment

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More About Compost & Erosion

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What is compost?

"Compost is an organic soil conditioner that has been stabilized to a humus-like product, that is free of viable human and plant pathogens and plant seeds, that does not attract insects or vectors, that can be handled and stored without nuisance, and that is beneficial to the growth of plants (Haug 1993)."

What is composting?

Composting is a natural process of decaying organic materials by microorganisms. In composting operations, this process becomes more efficient by controlling the moisture and aeration conditions to produce temperatures above 113 degrees Fahrenheit.

Why do we compost organics?

Iowa produces 900,000 tons/yr of organics that currently enter landfills. Composting reduces the volume of compost by approximately 50 percent (NRAES 1992). In addition, it provides a method for stabilizing organics and reducing the odors associated with many organic materials.

What are the benefits to composting?

- Reduces Organic Wastes from Entering Landfills

References:

Haug, Roger T. (1993). *The Practical Handbook of Compost Engineering*. Lewis Publishers. Boca Raton, FL.

Natural Resource, Agriculture, and Engineering Service. (1992). *On-Farm Composting Handbook*. NRAES-54. Ithaca, NY.



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- Excellent Soil Conditioner
- Lowers Risk of Pollution and Nuisance Complaints
- Pathogen Destruction
- Bedding Substitute

What are the drawbacks to composting?

- Time and Money
- Land Required for Operations
- Marketing is Necessary

Why is composting important to Iowa?

Iowa's composting facilities convert 350,000 tons/year of yard waste, sewage sludge and industrial organics into a valuable soil builder. This creates a valuable product and saves landfill space.

What is the significance of this research?

Since the Iowa Legislature banned landfilling of yard wastes and other organics in 1989, new markets for compost need to be developed. With over 112,000 miles of roadways in Iowa to maintain, the use of compost on road construction and maintenance projects may reduce erosion.

What is the goal of this research?

The 3-year study is designed to quantify the impacts of using compost to control storm water runoff and erosion on newly completed highway construction sites.

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