



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

FEB 25 2010

**Mr. F. Allen Barnes, Director
Environmental Protection Division
Georgia Department of Natural Resources
4244 International Parkway, Suite 104
Atlanta, GA 30354**

Dear Mr. Barnes:

Thank you for bringing to our attention recent proposals in the Georgia Legislature to possibly reverse the ban on landfilling yard waste trimmings. I understand that current proposals would allow lined landfills with methane collection systems to mix yard trimmings with municipal solid waste. The stated objective of such proposals is to generate energy in the form of landfill (methane) gas. Other states are struggling with this issue, and twenty-three have enacted a ban on yard trimmings from landfills. We share your concern over the negative impacts resulting from the landfill disposal of yard trimmings.

As a policy matter, the United States Environmental Protection Agency (EPA) supports the continuation of landfill bans for yard trimmings and sees them as essential to ensuring that yard waste continues to find its way into reuse markets, such as composting. Federal and state environmental agencies have long supported adoption of a preferred waste management hierarchy, starting with source reduction of materials throughout design and production, recycling/composting of materials that can be reused, and finally, landfilling or combusting only those materials that cannot be managed effectively in any other way. Reversing Georgia's yard trimmings landfill ban would be inconsistent with this preferred waste management hierarchy since yard trimmings would not be recycled into potentially higher value products, but only partially converted to methane for energy, leaving residual materials in the landfill.

The increasing markets for compost and bans on yard trimmings disposal in landfills are some of the reasons that the national recycling rate has been increasing since the mid-1960s. Since Georgia adopted the landfill ban in 1996, over 13% of municipal solid waste has been diverted away from landfills and is being used as a feedstock for other industries. This has extended the life of landfills in Georgia, thereby reducing the costs of siting, zoning, building and maintaining new landfills in the State.

There are documented inefficiencies in landfilling yard trimmings to generate methane for energy. EPA strongly supports landfill gas collection systems, but they do

not capture 100% of the methane generated inside a landfill. EPA's Landfill Methane Outreach Program estimates that gas collection systems capture 60 to 90% at various times of operation. The remainder of the methane is released into the atmosphere. Landfill gases have been viewed historically as local nuisances. We now know these gases have the potential to impact our environment today and in the future. The methane gas (CH₄) produced by landfills has over 20 times the greenhouse gas (GHG) potential of carbon dioxide (CO₂) generated by composting. One way to reduce waste disposal's negative impact on the atmosphere is to reduce the releases of landfill methane, by both putting less methane-generating materials into landfills and converting the remaining CH₄ produced, by combustion, into CO₂, with its lower GHG pollution potential. Again, EPA encourages efforts to capture landfill methane from existing (and closed) landfills for energy production. However, EPA does not support adding organic wastes to landfills in hopes of creating waste-to-energy facilities.

It is also worth noting that the economic activity generated by recycling is significant. In 2002, EPA found in its Recycling Economic Information study that five times as many people were employed in the recycling/reuse industries than in the waste management industry and that a recycling industry employee is paid about \$1,500 more in wages than one in the waste industry. Composters and other recyclers of organic waste are generating high value products used to support a variety of important industries, such as agriculture, horticulture, landscaping, stormwater management, and erosion control.

Thank you for the opportunity to discuss this issue. If you have any questions, please feel free to contact either myself or Jon Johnston at 404-562-8527.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan Farmer". The signature is written in a cursive, flowing style.

G. Alan Farmer, Director
RCRA Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JAN 16 2010

REPLY TO THE ATTENTION OF:

L-8J

George W. Bruchmann
Waste and Hazardous Materials Division
Michigan Department of Environmental Quality
525 W. Allegan Street
P.O. Box 30241
Lansing, Mi 48909

Dear Mr. Bruchmann,

Thank you for bringing to our attention the State of Michigan's legislative interest to reverse Michigan's landfill ban as a means to increase the generation of methane for energy use. Other states are also struggling with this issue and we share your concern over the negative impacts resulting from the landfill disposal of yard waste for methane.

The United States Environmental Protection Agency (EPA) supports the continuation of landfill bans for yard waste and sees them as essential to ensuring that yard waste continues to find its way into reuse markets, such as composting. Federal and state environmental agencies have long supported adoption of a preferred waste management hierarchy, starting with source reduction of materials throughout design and production, recycling/composting of materials that can be re-used, and finally, landfilling or combusting materials that cannot be effectively managed. Reversing Michigan's yard waste landfill ban would be inconsistent with the preferred waste management hierarchy since the yard waste would not be recycled into potentially higher value products but only partially converted to methane for energy use, leaving residual materials in the landfill.

The demand for compost and bans on yard waste disposal in landfills are some of the reasons that the national recycling rate has been increasing since the mid-1960s, and currently at 33.2%. About 25% of all materials recovered for recycling in the U.S. each year is yard waste. Returning yard waste to landfills would put many of these gains at risk, and reduce the chances of reaching our current national goal of a 35% recycling rate.

Besides the inefficiencies of landfilling the yard waste to generate methane for energy, the yard waste in landfills would be unavailable for reuse by composters. This is a missed opportunity to support 'green' jobs and economic opportunity in the recycling industry. MDEQ's review of the October 16, 2009 House (5334) and Senate (725) Bills (MDEQ Bill Reviews) addresses this concern. The economic activity generated by recycling is significant. In 2002, EPA found in its Recycling Economic Information study that five times as many people were employed in the recycling/reuse industries than in

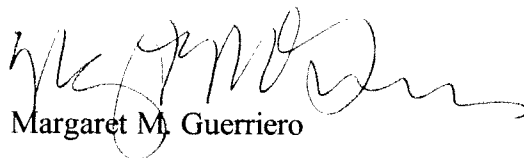
waste management and that a recycling industry employee is paid about \$1,500 more in wages than one in the waste industry. Composters and other recyclers of organic waste are generating high value products used to support a variety of important industries, such as agriculture, horticulture, landscaping, stormwater management, and erosion control.

Landfill and waste dump gases have been viewed historically as local nuisances. We now know that these gases contribute to global climate change, with the potential to impact our environment today and in the future. The landfill degradation process creates methane gas, with a greenhouse gas (GHG) potential over 20 times greater than the carbon dioxide (CO₂) generated by composting. One way to reduce waste disposal's impact on the atmosphere is to reduce the releases of landfill methane, either by putting less methane-generating materials into landfills or converting methane, by combustion, into CO₂, with its lower GHG potential. Adding more yard waste to landfills can also generate acidic landfill leachate, making other waste constituents more mobile.

Increasing attention is being paid to GHG emissions from landfills and other generating sources. As MDEQ has noted, gas collection systems do not capture 100% of the methane generated inside of a landfill. EPA's Landfill Methane Outreach Program estimates that gas collection systems capture 60 to 90% at various times of operation. Reversing landscape waste bans would increase the amount of methane entering the atmosphere. In December 2009, the EPA Administrator found that current and projected concentrations of the six key well-mixed GHGs (CO₂, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) in the atmosphere threaten the health and welfare of current and future generations. EPA's GHG Reporting Rule, released in 2009, requires municipal solid waste landfills that generate 25,000 metric tons of CO₂ equivalent or more per year to report their releases to EPA.

Again, thank you for the opportunity to discuss this issue. If you have any questions, please feel free to contact Chris Newman of my staff at 312-353-8402.

Sincerely,



Margaret M. Guerriero