

ZERO WASTE TASK FORCE RECOMMENDATIONS

August 27, 2014

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DeKalb County Zero Waste Task Force

Introduction

The DeKalb County Board adopted Resolution 2013-66 on October 16, 2013 creating a Task Force to consider the adoption of a Zero Waste guiding principle for the DeKalb County Solid Waste Management Plan. The thirteen members of the Task Force represented individuals from the community, government, education, and industry. The Task Force met monthly beginning November 2013 through August 2014. Their charge was to identify the goals, objectives, policies, programs, tasks and cost of implementing a Zero Waste approach and to share their findings with the County Board in August of 2014.

In the hierarchy of waste management, if waste is not produced (Zero Waste) then there is no need for disposal. When waste is produced, it gives precedence to prepare for reuse, recycling, recovery and last of all disposal. Prevention or reduction of waste minimizes the generation of waste resulting in the least environmental and economic costs because it requires no collecting or processing of materials. It involves using less material in design and manufacturing, trying to keep products longer and using less hazardous materials. Reuse is any operation where products or materials that are not waste are used again for the same purpose for which they are intended. It involves checking, cleaning, repairing, and or refurbishing entire items or spare parts. Recycling includes the collection of used, reused, or unused items that would otherwise be considered waste. Recycling involves sorting and processing the recyclable products into raw material and then remanufacturing the recycled raw material into new products. Recovery of waste is separated into two categories: the recovery of materials and the recovery of energy. The recovery of materials includes activities such as recycling and composting which generally require a collection system and method of material processing and conversion to a new product. Recovery of energy, such as incineration, is usually less preferred. The conversion of non-recyclable waste materials into usable waste material into heat, electricity or fuel is done through a variety of processes such as anaerobic digestion and gasification. The last resort is disposal which involves dumping and incineration of waste without waste recovery. Landfills are the most common form of waste disposal.

Process

Given the diversity of the membership of the Task Force, early meetings focused on education and included a number of reports which are included in the Attachments of this document. The Task Force gained a thorough understanding of the current state of DeKalb County Solid Waste as well as the opportunities and challenges. It was during this time that the Task Force realized that accomplishing “Zero Waste” was not realistic. However, by recommending “Zero Waste” as a guiding principle, the County could become less dependent on disposal and focus more on reuse, recycle and recovery. Having made this decision, the next step was looking at ways to enhance these initiatives. The Task Force was educated on the current status of curbside and rural recycling, the practices of various communities with regard to commercial and residential accounts, opportunities and challenges for organic recycling, and sample ordinances.

Recommendations

The concepts and discussion items generated by the Task Force meetings were updated monthly and provided a framework for discussions. It was from this list in which three priorities emerged:

- Expand Opportunities for Rural Recycling
- Commercial/Multi-Unit Housing Recycling
- Harvesting Organics

Although DeKalb County has had higher recycling rates than those mandated by the Solid Waste and Recycling Act, (Averaging 45-60% dependent on construction debris), DeKalb residents landfilled 82,088 tons or 4.28 pounds per capita per day in 2012. The Task Force agreed that increasing recycling rates would definitely help to reduce the amount of waste going into the landfill. The recommended goal is to reduce the landfill rate by fifty percent in twenty years or 2.14 pounds per capita per day by 2,034.

In order to do so, the first initiative would be to look at increasing opportunities for rural recycling. In some rural communities, curbside recycling is not offered at all, or it occurs through drop off sites with limited operating hours. Enhancing these opportunities would encourage more recycling.

The second consideration would be to address commercial/multi-unit housing accounts that currently do not have recycling as part of their waste hauling program. Commercial by definition is not only a business but includes multi-unit housing consisting of more than four units. Opportunities to add commercial/multi-unit housing licensing can be implemented with the adoption of local or county ordinances, requiring adequate space for recycling containers at multi-unit properties and businesses, as well as increased education.

Lastly, providing opportunities for organic waste for all users would significantly impact what we throw away. Organics account for approximately 21 percent of the material that we landfill each year. The other large contributors are paper at a little more than 24 percent, and construction and demolition debris at a little more than 25 percent. Several communities have had pilot organic recycling programs that have been very successful for residential and business accounts. These should be reviewed for DeKalb County.

In order to move the principle of Zero Waste forward, it will require increased outreach and education at all levels, collaboration among governments, keeping the concept in the public eye through a variety of communication strategies, working with waste haulers, and impacting behavior. Key to the success of any program will be making it easy and accessible for everyone to participate. The general public knows that recycling is the right thing to do. Changing behavior is the challenge.

The membership of the Zero Waste Task Force recommends the County adopt Zero Waste as a guiding principle in order to divert material from landfills into productive uses and reduce environmental impacts. They also recommend that the initial tasks focus on: the expansion of Rural Recycling, proposing an Ordinance to address Commercial/Multi-Unit Recycling and pilot programs to harvest organics. It is also recommended that a community advisory committee continue to provide input into the planning, track progress, evaluate success and continue to advance efforts to achieve Zero Waste.

Program Costs

In order to work toward implementation of the priorities, the Solid Waste Coordinator position will be increased from a part-time (.60 full-time equivalents) to a full-time position. Thus, Personnel and Administration costs will increase with the adoption of Zero Waste as a guiding principle in order to expand programming.

It is anticipated there will be additional operational costs to expand the program. However, these are unknown pending further planning. Estimated program costs can be funded through the Solid Waste Program at this time, with no additional County funds.

See FY 2014 Budget projections compared to FY2015 Budget estimates that include program expansion:

Solid Waste Program	Budget FY2014	Zero Waste Increment	Budget FY2015
Coordinator - Salary & Benefits	43,700	35,300	79,000
Administration & Overhead	12,000	6,000	18,000
Oversight & Supervision	(in kind)	11,000	11,000
Total Personnel & Administration	55,700	52,300	108,000
Professional Services	17,000	0	17,000
Commercial Services	15,800	0	15,800
Public Notices	2,100	1,900	4,000
Miscellaneous	1,900	0	1,900
Total Operations	36,800	1,900	38,700
Total Costs	92,500	54,200	146,700

The Health Department has contributed *Oversight & Supervision* in-kind. This cost will be provided by the Solid Waste Program starting 2015. *Professional Services* is for elementary school education provided by the U of I Extension. *Commercial Services* is for the operation of rural recycling sites in Kingston and Somonauk. *Public Notices* are for paid advertising of the municipal recycling calendar, rural sites and special collection events.

Special collection events that have not yet been planned will add operational costs that are not reflected as incremental increases 2014 to 2015. Costs vary from \$1,000 (used oil) to \$15,000 (latex paint). Household hazardous waste collections cost approximately \$75,000.

Strategies requiring a large capital investment, such as incineration and a Materials Recovery Facility (MRF), were determined unfeasible at this time.

The recommendations of the Task Force seek to achieve the greatest impact on reduction of waste disposal in the landfill for the lowest cost.